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**National Highway
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Division of Arvin/Calspan
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CALSPAN ON-SITE AIR BAG DEPLOYMENT INVESTIGATION

CALSPAN CASE NO. 92-10

VEHICLE - 1991 DODGE CARAVAN

LOCATION - [REDACTED] PA

ACCIDENT DATE - [REDACTED] 1992

Contract No. DTNH22-87-C-27169

Prepared for:

U.S. Department of Transportation
National Highway Traffic Safety Administration
Washington, D.C. 20590

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

TECHNICAL REPORT STANDARD TITLE PAGE

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15. Supplementary Notes On-site investigation of an air bag deployment crash that involved a 1991 Dodge Caravan. The vehicle struck the side of a 1988 Dodge Caravan which subsequently overturned. Both occupants of the '88 Caravan were belted and survived the potentially fatal crash.					
16. Abstract <p>This crash occurred on a four-lane divided highway in █████, PA on █████ 1992. An air bag equipped 1991 Dodge Caravan was cut-off by a non-contact vehicle in the left eastbound lane of travel. The driver of the Caravan swerved across the grass median and entered the westbound lane of travel. The left frontal area of the '91 Caravan impacted the left side area of a 1988 Dodge Caravan. The 10 o'clock/ 1 o'clock impact configuration resulted in velocity changes of 23.3 kph (14.2 mph) for the air bag equipped Caravan and 22.8 kph (14.2 mph) for the 1988 Dodge Caravan. As a result of the impact, the supplemental driver's air bag system deployed.</p> <p>The belted female driver of the '91 Dodge Caravan sustained a thermal burn (AIS-1) of the right forearm and finger and left forearm contusions (AIS-1) from her involvement with the air bag. She sustained left shoulder and chest pain from loading the active belt webbing as she responded to the 10 o'clock impact force. The driver also sustained lumbar strain (AIS-1) from the impact force and restraint loading.</p> <p>The 1988 Dodge Caravan was rotated in a counterclockwise direction and subsequently overturned on the concrete road surface. The vehicle completed six quarter turns before coming to rest on its roof. The belted female driver sustained multiple contusions, abrasions, and lacerations (AIS-1) from various sources during the crash. Her 14 year old daughter was belted in the right front position. Her left foot was ejected out the right front door window opening and was crushed (AIS-3) between the right A-pillar and concrete road surface.</p>					
17. Key Words Supplemental driver's air bag system Front to side impact configuration Proper belt usage Subsequent rollover				18. Distribution Statement General Public	
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CALSPAN ON-SITE AIR BAG DEPLOYMENT INVESTIGATION

CALSPAN CASE NO. 92-10

VEHICLE - 1991 DODGE CARAVAN
LOCATION - [REDACTED], PA

SUMMARY

This crash occurred on a 4-lane divided highway on [REDACTED] 1992 during daylight hours in [REDACTED], PA. The dry concrete road surface was straight with a 2% downgrade to the west. An air bag equipped 1991 Dodge Caravan was traveling in an easterly direction on the inboard travel lane of the divided highway at an estimated speed of 88-96 kph (55-60 mph). A noncontact vehicle that was traveling on the outboard eastbound lane initiated a rapid lane change maneuver directly in front of the Dodge Caravan. The driver of the Dodge Caravan took evasive action and swerved to the left (counterclockwise steering input) to avoid impact. The Caravan traversed the grass median and entered the inboard westbound travel lane.

A 1988 Dodge Caravan was traveling in the outboard westbound lane of the divided highway as the '91 Caravan entered the grass median. The female driver of the 1988 Caravan stated that she was traveling at 88-96 kph (55-60 mph) and did not detect the encroaching vehicle until immediately prior to impact; therefore, she did not initiate avoidance action.

The front left area of the 1991 Dodge Caravan impacted the left side area of the 1988 Caravan. Resultant directions of force were within the 1 o'clock sector for the '91 Caravan and 10 o'clock for the '88 Caravan. Frontal damage to the 1991 Caravan began 28.6 cm (11.25") left of center and extended to the left front corner area of the vehicle. Maximum crush was 41.6 cm (16.375") located at the left corner of the bumper reinforcement bar. Crush values across the front of the vehicle were as follows: $C_1=41.6$ cm (16.375"), $C_2=32.1$ cm (12.625"), $C_3=20.0$ cm (7.875"), $C_4=9.8$ cm (3.875"), $C_6=-5.1$ cm (-2.0").

As a result of the crash the 1991 Caravan underwent a velocity change of 22.3 kph (14.4 mph) and as a result, the driver's air bag system deployed. The 1988 Caravan underwent a velocity change of 22.8 kph (14.2 mph).

The 1988 Dodge Caravan sustained moderately severe left side damage that began on the left front wheel and extended down the entire length of the van. Maximum crush was 21.9 cm (8.625") located at the lower body crease 17.8 cm (7") rearward of the left B-pillar. The Field L was 330.5 cm (130.1") with the following crush values: $C_1=4.4$ cm (1.75"), $C_2=14.6$ cm (5.75"), $C_3=19.1$ cm (7.5"), $C_4=20.0$ cm (7.875"), $C_5=14.3$ cm (5.625"), $C_6=0$ cm (0"). The front bumper of the 1991 Caravan impacted the left rear tire and wheel of the '88 Caravan with sufficient force to fracture the left rear axle which resulted in complete separation of the wheel and brake assembly.

SUMMARY (CONT'D.)

The crash rotated the 1988 Dodge Caravan in a counterclockwise direction which initiated a side-over-side rollover sequence. The van rolled approximately 6 quarter turns before coming to rest on its roof a police reported distance of 91.4 m (300') west of the point of impact. At rest the vehicle was facing in a northwesterly direction in the outboard westbound travel lane. The air bag equipped 1991 Dodge Caravan was deflected into the grass median where it came to rest approximately 30.2 m (99') east of the initial point of impact. At rest, the vehicle was facing in an easterly direction.

The driver of the 1991 Dodge Caravan was a 31 year old female. She was properly restrained by the active 3-point lap and shoulder belt system. Her seat was adjusted to a rearward position (2" from full rearward position) and the vehicle was equipped with a fixed, nontilting column. At impact she initiated a forward trajectory and loaded the active belt system. No evidence of loading was visible on the belt webbing or the restraint hardware. Her face probably contacted the deployed air bag which prevented her from possible contact with the steering assembly. The deployed air bag contacted the anterior aspect of her left forearm, which resulted in a 17.8 cm (7") x 5.1 cm (2") contusion (AIS-1) of her forearm. The hot gases within the bag burned the anterior aspect of her right forearm (AIS-1) as her arm was contacted by the air bag. She also reported the hair on her right forearm was singed in the area of the burn. The upper air bag module flap struck her left ring and 5th fingers which resulted in contusions (AIS-1) to the dorsal aspect. The driver sustained pain over the left shoulder and upper chest from loading the active belt webbing. She also sustained lower back strain (AIS-1) from the impact force and restraint loading. The driver was transported by ambulance to a local hospital where she was treated for her injuries and released.

The 1988 Dodge Caravan was occupied by the 36 year old female driver (67", 130 lbs.) and her 14 year old daughter (61", 125 lbs.). Both occupants were properly wearing the active 3-point lap and shoulder belt systems. In response to the initial impact with the other Caravan, the driver initiated a lateral trajectory to her left. Her left lateral thigh contacted the left door panel which resulted in a contusion (AIS-1) to the thigh above the knee. The driver's left elbow and left shoulder areas contacted the road surface during the rollover sequence which resulted in abrasions (AIS-1). She also sustained a laceration (AIS-1) above the left ear from probable contact with flying glass. As the vehicle came to rest, the driver unbuckled the active belt system and crawled out of the left front door window (all side glass with the exception of the left rear quarter window was shattered during the rollover). She sustained lacerations of both knees that probably resulted from shattered glass as she crawled out of the vehicle. There was no evidence of knee contacts within the vehicle.

During the rollover sequence, the right front occupant's left foot traveled through the right front door window opening and was crushed (AIS-3) between the concrete road surface and the right upper A-pillar. White rubbery material (probable sneaker) was found embedded in the pillar adjacent to the door window frame. The dorsal aspect of her foot was also heavily abraded (AIS-1). The passenger subsequently unfastened her belt system and crawled out of the left front door window. She was transported to a local hospital and admitted for treatment of her injuries (10 days). The driver was treated and released at the same hospital.

ACCIDENT SCHEMATIC
CALSPAN CASE NO. 92-10

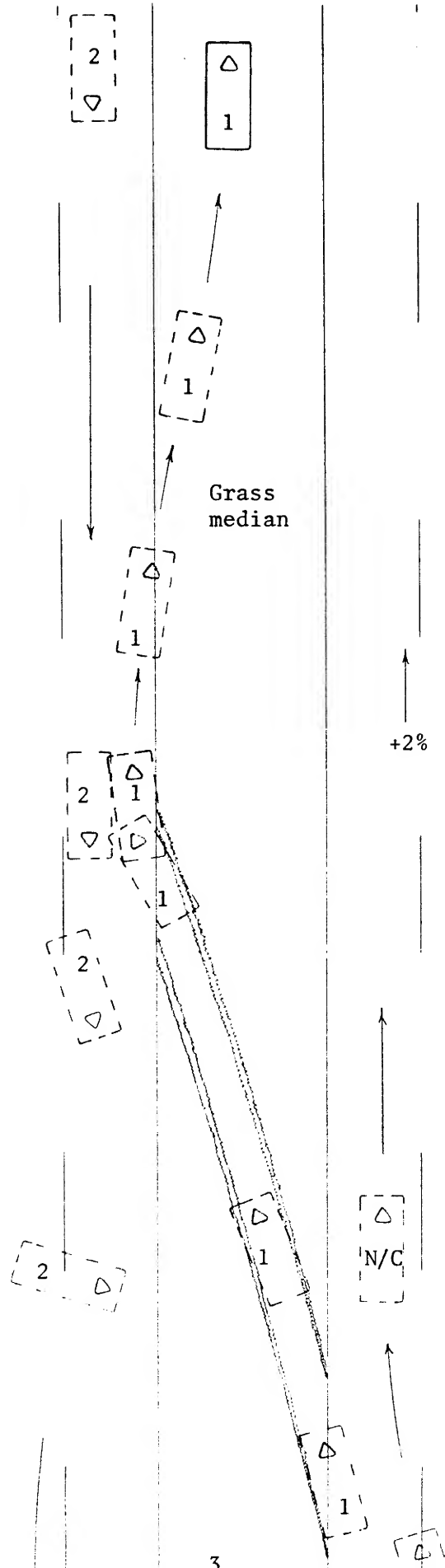
Paved
shoulder →

← Paved
shoulder

VEHICLES:

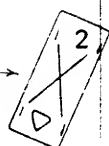
#1 - 1991 Dodge
Caravan

#2 - 1988 Dodge
Caravan SE

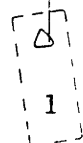
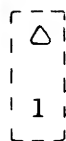
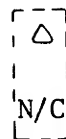


Paved
shoulder

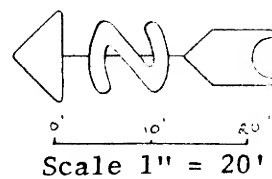
Approximate
Final Rest
Position of
V-2



Grass
median



Paved
shoulder



CALSPAN ON-SITE AIR BAG DEPLOYMENT INVESTIGATION

CALSPAN CASE NO. 92-10

VEHICLE - 1991 DODGE CARAVAN
LOCATION - [REDACTED] PA

ACCIDENT DATA

Location: Rural four-lane divided highway
City/Township: [REDACTED], PA
Area/Type: Rural/Residential
Accident Date/Time: [REDACTED] 1992, daylight hours
Investigating Police Agency: [REDACTED] State Police
Accident Type: Minivan/Minivan, front to side impact configuration with subsequent rollover
Air Bag Vehicle Driver Injury Severity: Minor (AIS-1)

AMBIENCE

Viewing Conditions: Daylight
Weather: Clear
Precipitation: None
Road Surface: Dry

HIGHWAY

Type: State route
Number of Lanes: 4, divided
Width: 7 m (23')
Surface: Concrete, worn condition
Median: 6.4 m (21') wide grass median
Edge: Outboard edge - 2.6 m (8'6") paved shoulder
Inboard edge - Grass median

HIGHWAY (CONT'D.)

Vertical Alignment: 2% grade, positive to the east
Horizontal Alignment: Straight
Estimated Coefficient of Friction: .65
Traffic Density: Moderate

TRAFFIC CONTROLS

Signals: None
Signs: No pertinent signs
Markings: Broken white lane lines, solid white outboard edgelines, solid yellow inboard edgelines
Speed Limit: 55 mph

VEHICLES

	<u>Air Bag Vehicle</u>	<u>Vehicle #2</u>
Description:	1991 Dodge Caravan, 7 passenger seating configuration	1988 Dodge Caravan, SE, 5 passenger seating configuration
V.I.N.:	2B4GK25KGMR (production number deleted)	2B4FK41KLJR (production number deleted)
Color:	Burgundy	Light blue
Odometer:	14,145.5 km (8,786 miles)	123,481.5 km (76,696.6 miles)
Engine:	4 cylinder, 2.5 liter	4 cylinder, 2.5 liter
Transmission:	3-speed automatic, column mounted selector lever	3-speed automatic, column mounted selector lever
Steering:	Power	Power
Brakes:	Power front disc/rear drum	Power front disc/rear drum
Padding:	Upper and mid instrument panel, soft edged steering wheel rim and air bag module cover, sunvisors, door panels, door armrests, fold-down armrests, integral head restraints, headliner	Upper and mid instrument panel, soft edged steering wheel rim and spoke cover, sunvisors, door panels, door armrests, fold-down armrests, integral head restraints, headliner

VEHICLES (CONT'D.)

	<u>Air Bag Vehicle</u>	<u>Vehicle #2</u>
Active Restraints:	3-point lap and shoulder belt systems in the six outboard seated positions, center rear (third seat) lap belt	3-point lap and shoulder belts in the left front and right front seated positions, 3 lap belts for the rear seat
Automatic Restraints:	Supplemental driver's air bag system that deployed at impact with vehicle #2	None
Defects:	None	None
Tow Status:	Towed due to vehicle damage	Towed due to vehicle damage

VEHICLE DAMAGE

	<u>Air Bag Vehicle</u>	<u>Vehicle #2</u>
Exterior:	<p>The air bag equipped 1991 Dodge Caravan sustained moderately severe frontal crush from its impact sequence with the side of vehicle #2. Maximum crush was 41.6cm (16.375") located at the left corner of the front bumper reinforcement bar. Direct contact damage on the bumper fascia began 28.6cm (11.25") left of center and extended 48.9cm (19.25") to the corner. The bumper fascia subsequently separated from the reinforcement bar and contacted the concrete road surface which resulted in abrasions across the full width of the fascia. The impact deformed the entire frontal area of the vehicle which resulted in a combined induced and direct contact damage of 139.7cm (55.0"). Crush values at the bumper reinforcement bar were as follows: C₁=41.6cm (16.375"), C₂=32.1cm (12.625"), C₃=20.0cm (7.875"), C₄=9.8cm (3.875"), C₅=2.2cm (0.875"), C₆=-5.1cm (-2.0").</p> <p>As a result of the front to side impact configuration, the 1991 Dodge Caravan sustained a 1 o'clock impact force. The</p>	<p>The 1988 Dodge Caravan sustained moderately severe left side damage from its impact sequence with the air bag equipped minivan. Direct contact damage began on the left front wheel, 15.2cm (6") rearward of the axle position, and extended rearward 330.5cm (130.1") across the dogleg of the left front fender, left door, and the left quarter panel. The direct contact damage ended at the left corner of the rear bumper. Maximum crush was 21.9 cm (8.625"). located on the lower crease of the left quarter panel 17.8cm (7") rearward of the left B-pillar. Crush values at the lower body crease level were as follows: C₁=4.4cm (1.75"), C₂=14.6cm (5.75"), C₃=19.1cm (7.5"), C₄=20.0cm (7.875"), C₅=14.3cm (5.625"), C₆=0.0cm (0.0"). The left door was jammed closed due to exterior deformation.</p> <p>As the bumper of the air bag equipped Dodge Caravan engaged with the left side of vehicle #2, it contacted the left rear tire and wheel and fractured the axle which resulted in complete separation of the tire, wheel, and brake assembly.</p> <p>The 1988 Dodge Caravan was rotated in a counterclockwise direction by the initial impact and subsequently</p>

VEHICLE DAMAGE (CONT'D.)

Air Bag Vehicle

Exterior (Cont'd.): lateral component of the impact force displaced the front bumper reinforcement bar to the vehicle's left. The left front fender was snagged by the side surface of vehicle #2 and separated from the 1991 Caravan. The upper fender support rail was also snagged and displaced outboard of the vehicle's body line. The left wheelbase was reduced in length by 4.8cm (1.9") while the right wheelbase was measured at 285cm (112.2"), .25cm (0.1") less than the specified length.

Components damaged by the impact included the front bumper fascia, front bumper reinforcement bar, both front frame rails, grille, hood, left headlamp assembly, radiator support panel, radiator, air conditioning condensor, left front fender, left fender support rail, left inner fender, and the transaxle (cracked case). There was no glass damage to the vehicle and all doors remained closed during the crash and fully operational post-crash.

CDC: 01-FLEW-2

Repair Cost: \$9,069.23 inclusive of air bag module, two front crash sensors, and the steering wheel clock-spring assembly

Vehicle #2

overturned on the concrete road surface. The vehicle initiated a side-over-side rollover sequence leading with its right side. Direct contact damage (i.e., abrasions) began on the right front fender flare at the axle position and extended 358.1cm (141") to the rear corner. The direct contact damage extended vertically up the right A-pillar and down the full length of the side rail. The vehicle's contact with the ground deformed the right roof gutter downward which prevented the right doors from opening. As the vehicle continued onto its roof, the van was pitched with its front side down due to the front wheel drive forward weight distribution. The paint abrasions were distributed across the full width of the roof and extended 25.4cm (10") rearward of the right B-pillar. The remainder of the roof was not damaged. The hood sustained direct contact damage that extended 71.1cm (28") left of center and 40.0cm (18.5") right of the center-line. Maximum roof crush was 8.9cm (3.5") located at the windshield header directly above the steering column. Rollover damage also extended the full length of the left side of the vehicle. The left rear quarter window was opened during the rollover and was scratched, but not broken. All other side glass and the backlight were shattered during the rollover. The windshield was cracked due to deformation of the A-pillars and the windshield header. There was no bond separation or laminant tears in the windshield.

Initial Impact - 10-LDEW-3

Subsequent Rollover - 00-TYDO-3

Total loss

VEHICLE DAMAGE (CONT'D.)

Air Bag Vehicle

Interior: There was no residual damage to the interior of the air bag equipped 1991 Dodge Caravan. The only visible occupant contact point was a possible left knee scuff mark on the protrusion of the knee bolster at the base of the steering column. The contact was located 48.3-52.1cm (19-20.5") left of center and 34.3-35.6cm (13.5-14") below the top surface of the instrument panel. There was no evidence of contact (i.e., makeup transfers) on the deployed air bag or loading evidence on the active belt system.

Vehicle #2

The interior of the 1988 Dodge Caravan sustained moderate damage from the left side impact and rollover sequences. The left side structure and the roof intruded into the passenger compartment. Maximum intrusion involved 8.9cm (3.5") of displacement of the windshield header and roof into the driver's position. The left roof side rail and upper left A-pillar were displaced 5.7cm (2.25") downward. The left door panel was displaced 6.4cm (2.5") laterally into the driver's seated area. The left rear occupant space sustained 7.6cm (3") of intrusion of the left B-pillar and side panel. The right front occupant's space was reduced in size by 5.1cm (2") of displacement of the windshield header area.

There was no residual damage to the vehicle's interior that resulted from occupant contact. The driver probably contacted the left door panel and armrest during the collision sequence. The passenger's left foot exited the right front door opening during the rollover and was subsequently crushed between the right A-pillar and the road surface. White sneaker fragments were embedded between the A-pillar and the door window frame and also between the windshield molding and the A-pillar.

VEHICLE VELOCITY ESTIMATES

	<u>Air Bag Vehicle</u>	<u>Vehicle #2</u>
Travel Speed:	88-96 KPH (55-60 mph) Driver estimate	88-96 KPH (55-60 mph) Driver estimate
Impact Speed:	Unknown	88-96 KPH (55-60 mph) Driver estimate
Total ΔV :	22.3 KPH (14.4 mph)	22.8 KPH (14.2 mph)
Longitudinal ΔV :	-21.1 KPH (-13.1 mph)	-13.1 KPH (-8.1 mph)
Lateral ΔV :	- 9.8 KPH (-6.1 mph)	18.7 KPH (11.6 mph)
Energy Absorption:	64,602.2 joules (47,641.8 ft.lbs.)	41,102.6 joules (30,311.7 ft.lbs.)

AIR BAG SYSTEM (1991 Dodge Caravan)

The 1991 Dodge Caravan was equipped with a supplemental driver's side air bag system which deployed as a result of the vehicle's impact sequence with vehicle #2. The system was equipped with two crash sensors that were mounted to the inner surface of the radiator support panel inboard of the front fenders. The right crash sensor was not damaged; however, the left sensor housing was cracked at the inboard mounting location. The wiring harnesses were not damaged.

The deployed air bag measured 61 cm (24") in diameter horizontally from seam to seam. The bag was tethered by four internal straps that were sewn to the bag with a 16.2 cm (6.375") diameter tether reinforcement located at the center point of the bag. Three rows of blue stitching attached the tether reinforcement to the face of the bag. There was no damage to the air bag or internal tether straps.

The air bag was vented by two 3.2 cm (1.25") diameter venting ports that were located on the back side of the bag (side away from driver) within the 12 o'clock sector of the bag. The center of the ports were located 7.3 cm (2.875") below the peripheral seam. With the steering wheel in a straight 12/6 o'clock position, there were eleven visible horizontal fold lines in the bag and only two pronounced vertical fold lines. The air bag was identified by the following alpha-numerical sequence:



COLLISION SEQUENCE

Pre-Crash: The driver of the air bag equipped 1991 Dodge Caravan stated that she was traveling in an easterly direction on the right outboard lane of the divided highway at an estimated speed of 88-96 KPH (55-60 mph) and initiated a lane change maneuver into the left lane in an attempt to avoid congestion in the right lane. A non-contact vehicle that was traveling in the right lane was reportedly cut-off by another non-contact vehicle. The driver of the non-contact vehicle swerved into the left lane directly in front of the Dodge Caravan. The driver of the Dodge Caravan applied her brakes and swerved into the grass median to avoid impact with the non-contact vehicle.

Based on physical evidence found at the crash scene, the Dodge Caravan initiated a slight counterclockwise yaw of approximately 8° as it traversed the grass median.

Vehicle #2, a 1988 Dodge Caravan, was traveling in a westerly direction on the left inboard travel lane at a driver estimated speed of 88-96 KPH (55-60 mph). The driver of the 1988 Dodge Caravan stated that she did not detect the encroaching 1991 Dodge Caravan in sufficient time to initiate avoidance action.

Crash: The left frontal area of the 1991 Dodge Caravan impacted the left side area of vehicle #2. Initial contact on vehicle #2 began at the left front wheel and extended rearward as the vehicles continued in their respective directions. The left front bumper area of the air bag equipped Dodge Caravan engaged against the left front door, quarter panel, and the left rear tire and wheel assembly of vehicle #2. The impact fractured the axle assembly which resulted in complete separation of the tire and wheel. Resultant directions of force were within the 1 o'clock sector for the 1991 Dodge Caravan and 10 o'clock for vehicle #2.

Velocity changes of 23.3 KPH (14.4 mph) for the air bag vehicle and 22.8 KPH (14.2 mph) for vehicle #2 were computed by the damage algorithm of the CRASHPC program. The impact induced deceleration deployed the 91 Dodge Caravan's supplemental driver's air bag system.

As a result of the front to side impact configuration, vehicle #2 was rotated in a counterclockwise direction and subsequently overturned in a side-over-side configuration. The vehicle rolled approximately 6 quarter turns before coming to rest on its roof a police reported distance of 91.4m (300') west of the initial point of impact.

The air bag equipped Dodge Caravan was displaced in a clockwise direction and was deflected onto the grass median. The momentum of the vehicle allowed it to travel a police reported distance of 30.2m (99') before it came to rest parallel to the roadway, facing in an easterly direction.

COLLISION SEQUENCE (CONT'D.)

Post-Crash:

Final Rest -	The driver of the 1991 Dodge Caravan relinquished control of the vehicle at impact. The Caravan was deflected in a clockwise direction onto the grass median where it came to rest facing in an easterly direction. Vehicle #2 overturned on the concrete road surface and came to rest on its roof. At final rest, vehicle #2 was blocking the outboard westbound travel lane and was facing in a northwesterly direction, diagonal to the roadway.
Driver Activities -	<p>The driver of the air bag equipped Dodge Caravan noted a smoke-like substance (air bag discharge) within her vehicle as it came to rest. She initially thought that the vehicle was on fire. The driver immediately unfastened her active restraint system and opened the left front door and exited the vehicle. She waited on the grass median for police and rescue personnel to arrive on-scene.</p> <p>The occupants of the overturned vehicle #2 were hanging upside down in the vehicle by the active belt systems. The driver smelled gasoline leaking from her vehicle and she began to panic. She stated that she had difficulty releasing the buckle assembly of her belt system due to her emotional state and not because of hardware malfunction. As the driver unbuckled her belt system, she crawled out of the vehicle through the left front door window opening. Her right front passenger unbuckled her restraint system without difficulty and exited the vehicle through the same opening.</p>
Police Activities -	The investigating police officer arrived on-scene approximately 17 minutes following the crash. He was assisted by several troopers from his department in diverting traffic around the crash scene. The travel lanes were obstructed by vehicle #2 and debris from both vehicles.
Rescue Activities -	Two ambulances responded to the crash scene. EMTs provided initial treatment to the injured occupants, then transported them by ambulance to a local hospital. Both drivers were treated for their injuries and released. The right front occupant of vehicle #2 was admitted for treatment of her injuries.
Scene Clearance -	A local towing service responded to the crash scene to remove the involved vehicles. Normal traffic flow was restored 1 hour and 10 minutes following the crash.

HUMAN FACTORS/OCCUPANT DATA

Air Bag Vehicle

Driver:	31 year old female
Height:	172.7 cm (68")
Weight:	56.25 kg (125 lbs.)
Active Restraint System Usage:	3-point lap and shoulder belt
Usage Source:	Vehicle inspection, police report, driver interview
Eyewear:	Soft contact lenses, remained in place, not damaged
Vehicle Familiarity:	10 months
Route Familiarity:	Daily
Trip Plan:	En route to residence from work
Manner of Leaving Scene:	Ambulance
Type of Medical Treatment:	Treated and released at a local hospital

DRIVER INJURIES

<u>Injury</u>	<u>Severity (OIC/AIS)</u>	<u>Source</u>
Thermal burn of the right anterior forearm, 7.6cm (3") x 3.8cm (1.5"), hair on forearm was singed	Minor (RRBI-1)	Air bag (Definite)
Contusion of the anterior aspect of the left forearm 17.8cm (7") x 5.1cm (2")	Minor (RLCI-1)	Air bag (Definite)
Contusions of the dorsal aspect of the left ring and 5th fingers	Minor (WLCI-1)	Upper air bag module flap (Probable)
Lumbar strain	Minor (BITM-1)	Impact force/restraint loading
Pain in left shoulder	N/A	Shoulder belt webbing (Definite)
Chest pain	N/A	Shoulder belt webbing (Definite)

HUMAN FACTORS/OCCUPANT DATA (CONT'D.)

DRIVER KINEMATICS

The driver of the 1991 Dodge Caravan was in a normal, upright seated position at impact with both hands bracing against the steering wheel at the 10 and 2 o'clock positions. Her seat was adjusted to a rearward position, 5.1cm (2") from the full rearward position and the seat back was set to a near vertical position. The vehicle was equipped with a standard non-tilting steering column. The driver was properly wearing the active 3-point lap and shoulder belt webbing. Belt usage was supported by driver and police statements, driver injury patterns, the lack of interior occupant contact points, and by routine usage wear marks that were visible on the latchplate. There was no evidence of driver loading on the active belt system.

The driver responded to the 1 o'clock impact force by moving forward and slightly to her right with respect to the decelerating vehicle. The driver's air bag deployed and initially contacted the anterior aspects of the driver's forearms. She was wearing a short sleeve white blouse and the hot gas within the bag burned the anterior aspect of her right forearm and singed the hair on the arm. The burn was approximately 3.8-7.6cm (1.5 x 3") in size and was located on the mid area of the forearm. (The driver stated that the minor severity burn resembled a sunburn and subsequently peeled 3 days post-crash.) She also sustained a 5.1 x 17.8 cm (2 x 7") contusion of the anterior aspect of the left forearm from contact with the deploying air bag. The upper left corner area of the air bag module flap probably contacted the driver's left ring and 5th finger which resulted in contusions to the dorsal aspect of the fingers. She also sustained a small contusion under the rings on her left ring finger from module flap contact.

The driver subsequently loaded the active belt webbing which was locked by the inertia reel retractor. Her loading force against the belt webbing resulted in pain of the anterior left shoulder and mid chest pain. Although not confirmed by contact evidence, the driver's upper torso and facial areas probably contacted the deployed air bag which, in combination with the active belt system, prevented her from contact with interior components and further injury. She did, however, sustain lumbar strain from the impact force and subsequent restraint loading.

The driver's left knee possibly contacted the knee bolster at the base of the steering column. Although no injury occurred, a small diameter scuff mark was noted to the bolster.

The driver noted a smoke-like substance within the vehicle immediately following the crash. She stated that the substance had a foul odor much like sulphur. In fear of a vehicle fire, she immediately exited the Dodge Caravan from the left front door. The driver noted black and brown soot on her new white nursing uniform. She attempted to wash the material from the clothing; however, the substance did not wash out and appeared to have burned the clothing. The driver discarded the cotton-polyester blend uniform.

HUMAN FACTORS/OCCUPANT DATA (CONT'D.)

	<u>Vehicle #2</u>
Driver:	36 year old female
Height:	170.2cm (67")
Weight:	58.5 kg. (130 lbs.)
Active Restraint System Usage:	3-point lap and shoulder belt system
Usage Source:	Police report, driver interview, vehicle inspection
Manner of Leaving Scene:	Ambulance
Type of Medical Treatment:	Treated and released at a local hospital

DRIVER INJURIES

<u>Injury</u>	<u>Severity (OIC/AIS)</u>	<u>Source</u>
Contusion of the lateral aspect of the left thigh above the knee	Minor (TLCI-1)	Left door panel/armrest (Definite)
Abrasions of the dorsal aspect of the left elbow	Minor (ELAI-1)	Road surface (Definite)
Abrasion of the lateral aspect of the left shoulder	Minor (SLAI-1)	Road surface (Definite)
3.8cm (1.5") laceration of the left parietal scalp above the ear (12 sutures)	Minor (HLLI-1)	Flying side glass (Probable)
Lacerations of both knees	Minor (KLLI-1, KRLI-1)	Shattered glass, post-crash exit from vehicle (Probable)

DRIVER KINEMATICS

The driver of vehicle #2 was in a normal seated position at impact. She was fully restrained by the active 3-point lap and shoulder belt system. Belt usage was supported by driver and police statements, heavy routine wear marks on the latchplate, the post-crash position of the belt webbing (jammed retractor), and the lack of contact points and/or ejection of the driver.

HUMAN FACTORS/OCCUPANT DATA (CONT'D.)

DRIVER KINEMATICS (CONT'D.)

At the initial impact with the air bag equipped Dodge Caravan, the driver of vehicle #2 responded to the 10 o'clock impact force and moved to her left and slightly forward. Her left lateral thigh contacted the left door panel and/or armrest which resulted in a contusion to the thigh, above the knee. Her left hip and shoulder areas probably contacted the left door panel which did not result in injury or contact evidence. The driver also loaded the active belt webbing; however, her trajectory was limited by the belt and the door and no injury resulted.

During the subsequent rollover, the left side glass shattered and contacted the left parietal scalp of the driver which resulted in a 3.8cm (1.5") laceration of the scalp above the ear. Her left arm and shoulder areas were ejected from the vehicle and contacted the concrete road surface. As a result of road contact, the driver sustained abrasions of the left elbow and left lateral shoulder. She again loaded the active belt system which prevented her from interior contact and probable ejection from the vehicle.

The vehicle came to rest on its roof and the driver immediately attempted to exit the vehicle. She stated that she had difficulty unfastening the restraint system as she panicked when she smelled gasoline. There were no mechanical problems with the buckle assembly of the belt system. As the driver crawled out of the vehicle, her knees were probably lacerated by shattered glass that came to rest on the headliner of the vehicle. A large blood stain was noted to the headliner directly above the driver's seated area. There were no visible contact points to the lower instrument panel area and no sharp objects that could have produced the knee lacerations.

The driver exited the vehicle through the left front door window opening. She was subsequently transported to a local hospital where she was treated for her injuries and released. She stated that the 3-point manual belt system saved her life and the life of her daughter.

PASSENGER DATA

	<u>Vehicle #2</u>
Right Front Passenger:	14 year old female
Height:	154.9cm (61")
Weight:	56.25 kg. (125 lbs.)
Active Restraint System Usage:	3-point lap and shoulder belt system
Usage Source:	Police report, driver interview, vehicle inspection
Manner of Leaving Scene:	Ambulance
Type of Medical Treatment:	Admitted to a local hospital for treatment of injuries
Hospital Stay:	10 days

HUMAN FACTORS/OCCUPANT DATA (CONT'D.)

PASSENGER INJURIES

<u>Injury</u>	<u>Severity (OIC/AIS)</u>	<u>Source</u>
Crushing injury of the left foot	Serious (QLNW-3)	Crushed between the right A-pillar and the concrete road surface
Abrasion to the dorsal aspect of the left foot	Minor (QLAI-1)	Road surface/A-pillar

PASSENGER KINEMATICS

The right front passenger of vehicle #2 was in a normal seated position pre-crash as stated by the driver of the vehicle. She was properly restrained by the active 3-point lap and shoulder belt system. Belt usage was confirmed by driver statements, heavy routine wear marks on the latchplate, blood stains on the belt webbings, and the lack of ejection of the right front passenger. There was no loading evidence on the belt system.

The passenger was displaced to her left by the initial impact force with the air bag equipped Dodge Caravan. She loaded the active belt webbing and the left fold-down armrest of her captain's chair. The belt system limited her trajectory and prevented her from contact with interior components.

During the subsequent rollover event, the right front passenger's left foot was thrust outboard of the vehicle through the right door window opening. The side glass was shattered during the rollover sequence. Her foot was crushed between the right upper A-pillar/door window frame and the concrete road surface. Fragments of her sneaker were found embedded in the pillar/window frame juncture and in the windshield trim gasket. As a result of the contact sequence, she sustained a large abrasion of the dorsal aspect of the right foot and a crushing injury of the foot which involved multiple metatarsal fractures.

The active belt system restrained the driver in her seated area and prevented her from complete ejection and serious or fatal injuries. As the vehicle came to rest, the passenger unfastened the belt system and crawled out of the left front door window opening. She was transported by ambulance to a local hospital where she was admitted for 10 days for treatment of her injuries.

SELECTED PRINTS



Pre-Crash Trajectory Of The 1991 Dodge Caravan.



Vehicle Departs Roadway And Enters The Grass Median.



Vehicle's Trajectory Across The Grass Median.



1991 Dodge Caravan Enters The Westbound Traffic Lane
And Impacts The 1988 Dodge Caravan.



Trajectory Of The 1988 Dodge Caravan.



Final Rest Area Of The 1988 Dodge Caravan.



Frontal View Of The 1991 Dodge Caravan.



Direct Contact Damage To The Front Bumper Facia.



Separated Front Bumper Facia With Road Abrasions Across Entire Width.



Left Front Three-Quarter View.



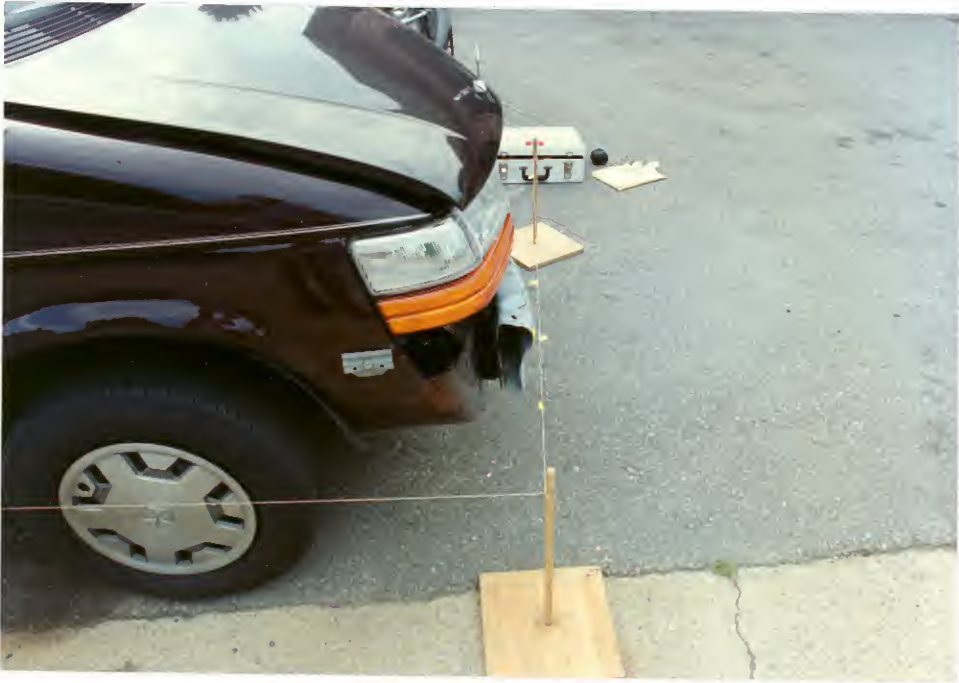
Perpendicular View Showing The Extent Of Crush.



Damaged Left Front Air Bag Crash Sensor.



Right Front Three-Quarter View.



Perpendicular View Of The Right Frontal Area.



Vehicle's Interior And The Deployed Driver's Air Bag.



Deployed Driver's Air Bag.



Forward View Of The Driver's Position And The Deployed Air Bag.



Driver's Left Knee Contact.



Driver's Active 3-Point Belt System.



Frontal View Of The 1988 Dodge Caravan.



Left Front Three-Quarter View.



Initial Impact Damage To The Left Side Of The 1988 Caravan.



Longitudinal View Showing The Extent Of Crush.



Right Side View.



Right Front Three-Quarter View.



Rollover Damage To The Roof Area Of The 1988 Caravan.



Sneaker Fragments In The Right A-Pillar/Door Window Frame.



Driver's Seated Area And Contact Points.



Driver's Seat And Active Restraint System.



Right Front Occupant's Seat Position And Active Belt System.

SLIDE INDEX

<u>Slide No(s).</u>	<u>Description</u>
1	Accident schematic
2	Air bag driver's injury mannequin
3	Driver #2's injury mannequin
4	Passenger's injury mannequin
5-7	Pre-crash trajectory of the air bag equipped 1991 Dodge Caravan
8	Vehicle departs left roadedge onto grass median
9,10	1991 Dodge Caravan crosses grass median
11	Vehicle enters the westbound travel lane and impacts vehicle #2
12-14	Vehicle #2's path of travel
15	Frontal view of the 1991 Dodge Caravan
16	Separated front bumper fascia
17	Direct contact damage on left side of fascia
18,19	Longitudinal views showing the lateral displacement
20	Perpendicular views showing the extent of crush
21	Left front three-quarter view
22	Left side view
23	Rear view
24	Right rear three-quarter view
25	Right front three-quarter view
26	Perpendicular view of the right frontal area
27,28	Damaged left front air bag crash sensor
29	Right front crash sensor
30	Overall view of the driver's seated area and the deployed air bag
31	Air bag venting ports and upper module flap
32	Closeup view of the deployed air bag with fold lines

SLIDE INDEX (CONT'D.)

<u>Slide No(s).</u>	<u>Description</u>
33	Tether reinforcement
34	Air bag identification numbers
35	Upper module flap and odometer reading
36	Lower module flap
37	Knee bolster
38	Probable left knee scuff.
39,40	Driver's active restraint system
41	Latchplate of the driver's belt system
42,43	Forward views of the Caravan's interior
44	Frontal view of the 1988 Dodge Caravan
45	Road abrasions to the top surface of the vehicle's hood
46	Left front three-quarter view
47	Left side view
48,49	Close-up views of the initial impact damage
50	Left rear three-quarter view
51	Longitudinal view showing the extent of crush
52	Right side view
53	Right front three-quarter view
54	Contact damage to the roof area
55	Sneaker fragments in the right A-pillar/door window frame
56-58	Driver's seated area
59	Blood on the headliner of the vehicle
60,61	Driver's active belt system
62	Latchplate of the driver's belt system
63	View across to the right front passenger's seated area
64	Passenger's seat and the active belt system
65	Latchplate for the passenger's active belt system

LABORATORY REPORT
COLLEGE CASE NO. 11-14



AGE 30
 SEX Male
 WT 175 lbs
 HT 5'10"

Normal form of the
 left anterior forearm
 D.A. 11/12 100-1, set
 up while the air bag

under version D.A. 11,
 square front/back/100-1
 setting

Position of the anterior
 aspect of the left forearm
 D.A. 11, air bag

Position of the dorsal
 aspect of the left thigh
 and its femur D.A. 11,
 air bag under flag
 (Posterior)



1. 5" location of
the left parotid
gland (L40-12), wearing
side glass

AGE 29
SEX Male
WT 170 lbs
HT 5' 7"



Location of the lateral
aspect of the left shoulder
(L40-11), rear surface

Location of the dorsal
aspect of the left elbow
(L40-13), rear surface

Location of both knees
(L40-14), wearing side
divided glass

Location of the lateral
aspect of the left thigh
(L40-15, left side pants)
sewed

AGE 34
 SEX Male
 WT 175 lbs
 HT 5'10"



creasing injury of left
 foot (not in, number
 because the real surface
 and the right, right
 leg/line

According to the dorsal aspect
 of the left foot (not in, real
 surface/leg/line



CA 9210 #5



CA9210 #6



CA9210 #7



CA9210 #8



CA 9210 #9



CA9210 #10



CA9210 #11



CA9210 #12



CA9210 #13



CA 8210 #14



CA9210 #15



CA9210 #16



CA9210 #17



CA9210 #18



CA9210 #19



CA 9210 #20



CA9210 #21



CA9210 #22



CA 9210 #23



CA9210 #24



CA9210 #25



CA 9210 #26



CA9210 #27



CA9210 #28



CA9210 #29



CA 9210 #30



CA9210 #31



CA9210 #32



CA 9210 #33



CA 9210 #34



CA9210 #35



CA9210 #38



CA 9210 #37
Best Available



CA 9210 #38
Best Available



CA 9210 #39



CA 9210 #40



CA9210 #41



CA9210 #42



CA 9210 #43



CA 9210 #44
Best Available



CA 9210 #45
Best Available



CA9210 #46



CA 9210 #47
Best Available



CA9210 #48
Best Available



CA9210 #49

Best Available



CA9210 #50
Best Available



CA9210 #51
Best Available



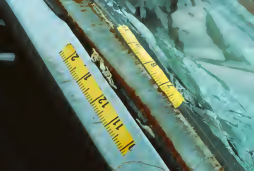
CA9210 #52



CA9210 #53



CA9210 #54



CA 9210 #55
Best Available



CA9210 #56



CA9210 #57
Best Available



CA9210 #58
Best Available

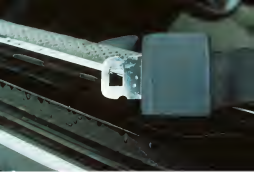
CA9210 #59



CA9210 #80
Best Available



CA9210 #61



CA9210 #62



CA9210 #63



CA9210 #64



CA9210 #65

APPENDIX A

Police Accident Report

BEST AVAILABLE COPY

COMMONWEALTH OF PENNSYLVANIA
POLICE ACCIDENT REPORT

(XX) REFER TO OVERLAY SHEETS

REPORTABLE ☒ NON-REPORTABLE ☐

PENNDOT USE ONLY

POLICE INFORMATION				ACCIDENT LOCATION			
1. INCIDENT NUMBER				20. COUNTY CODE			
2. AGENCY NAME PA STATE POLICE				21. MUNICIPALITY CODE			
3. STATION PRECINCT				22. ROUTE NO. OR STREET NAME			
5. INVESTIGATOR				23. SPEED LIMIT			
6. APPROVED BY				24. TYPE HIGHWAY 1			
7. INVESTIGATION DATE 9/2				25. ACCESS CONTROL 2			
8. ARRIVAL TIME				26. ROUTE NO. OR STREET NAME			
9. ACCIDENT DATE 9/2				27. SPEED LIMIT			
10. DAY OF WEEK				28. TYPE HIGHWAY			
11. TIME OF DAY				29. ACCESS CONTROL			
12. NUMBER OF UNITS 2				30. CROSS STREET OR SEGMENT MARKER PA (SA)			
13. # KILLED 0				31. DISTANCE WAS MEASURED <input type="checkbox"/> ESTIMATED <input checked="" type="checkbox"/>			
14. # INJURED 3				32. CONSTRUCTION ZONE <input type="checkbox"/>			
15. PRIV. PROP. ACCIDENT Y <input type="checkbox"/> N <input checked="" type="checkbox"/>				33. TRAFFIC CONTROL DEVICE <input type="checkbox"/>			
16. VEHICLE DAMAGE				34. PRINCIPAL INTERSECTING			
17. VEHICLE DAMAGE				35. TRAFFIC CONTROL DEVICE			
18. HAZARDOUS MATERIALS Y <input type="checkbox"/> N <input checked="" type="checkbox"/>				36. STATE PA			
19. PENNDOT PROPERTY Y <input type="checkbox"/> N <input checked="" type="checkbox"/>				37. STATE PA			
38. LEGALLY PARKED <input type="checkbox"/> DATE				39. PA TITLE OR OUT-OF-STATE VIN			
40. OWNER				41. OWNER			
42. CITY, STATE & ZIP CODE				43. YEAR			
43. YEAR				44. MAKE			
45. MODEL - (NOT BODY TYPE) CARAVAN				46. INS. Y <input checked="" type="checkbox"/> N <input type="checkbox"/> UNK <input type="checkbox"/>			
47. BODY TYPE				48. SPECIAL USAGE			
49. VEHICLE TYPE				50. INITIAL IMPACT POINT			
51. VEHICLE STATUS				52. TRAVEL SPEED			
53. VEHICLE GRADIENT				54. DRIVER PRESENCE			
55. DRIVER PRESENCE				56. DRIVER CONDITION			
57. DRIVER NUMBER				58. DRIVER NAME			
59. DRIVER ADDRESS				60. CITY, STATE & ZIP CODE			
61. SEX				62. DATE OF BIRTH			
63. PHONE				64. COMM. VEH. Y <input type="checkbox"/> N <input checked="" type="checkbox"/>			
65. DRIVER CLASS				66. DRIVER SS #			
67. CARRIER				68. CARRIER ADDRESS			
69. CITY, STATE & ZIP CODE				70. USDOT #			
71. ICC #				72. PUC #			
73. VER. CONFIG.				74. VER. CONFIG.			
75. NO. OF AXLES				76. HAZ. ARDOR. MATERIALS			
77. RELEASE OF HAZ. MAT Y <input type="checkbox"/> N <input type="checkbox"/> UNK <input type="checkbox"/>				78. RELEASE OF HAZ. MAT Y <input type="checkbox"/> N <input type="checkbox"/> UNK <input type="checkbox"/>			

78. RESPONDING EMS AGENCY										INCIDENT #									
79. MEDICAL FACILITY										ACCIDENT DATE: 92									

80. PEOPLE INFORMATION																			
A	B	C	D	E	F	G	NAME	ADDRESS			H	I	J	K	L	M			
1	1	F	3	1	1		OFFER #1				4	9	7	8	8	1			
2	1	F	3	6	3	1	OFFER #2				3	2	6	8	8	1			
2	3	F	1	4	3	1					3	2	9	8	8	1			

81. ILLUMINATION ☒ 2

82. WEATHER ☐ 0

83. ROAD SURFACE ☐ 1

86. DIAGRAM (WITNESS RELEASE) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K) (L) (M) (N) (O) (P) (Q) (R) (S) (T) (U) (V) (W) (X) (Y) (Z) (AA) (AB) (AC) (AD) (AE) (AF) (AG) (AH) (AI) (AJ) (AK) (AL) (AM) (AN) (AO) (AP) (AQ) (AR) (AS) (AT) (AU) (AV) (AW) (AX) (AY) (AZ) (BA) (BB) (BC) (BD) (BE) (BF) (BG) (BH) (BI) (BJ) (BK) (BL) (BM) (BN) (BO) (BP) (BQ) (BR) (BS) (BT) (BU) (BV) (BW) (BX) (BY) (BZ) (CA) (CB) (CC) (CD) (CE) (CF) (CG) (CH) (CI) (CJ) (CK) (CL) (CM) (CN) (CO) (CP) (CQ) (CR) (CS) (CT) (CU) (CV) (CW) (CX) (CY) (CZ) (DA) (DB) (DC) (DD) (DE) (DF) (DG) (DH) (DI) (DJ) (DK) (DL) (DM) (DN) (DO) (DP) (DQ) (DR) (DS) (DT) (DU) (DV) (DW) (DX) (DY) (DZ) (EA) (EB) (EC) (ED) (EE) (EF) (EG) (EH) (EI) (EJ) (EK) (EL) (EM) (EN) (EO) (EP) (EQ) (ER) (ES) (ET) (EU) (EV) (EW) (EX) (EY) (EZ) (FA) (FB) (FC) (FD) (FE) (FF) (FG) (FH) (FI) (FJ) (FK) (FL) (FM) (FN) (FO) (FP) (FQ) (FR) (FS) (FT) (FU) (FV) (FW) (FX) (FY) (FZ) (GA) (GB) (GC) (GD) (GE) (GF) (GG) (GH) (GI) (GJ) (GK) (GL) (GM) (GN) (GO) (GP) (GQ) (GR) (GS) (GT) (GU) (GV) (GW) (GX) (GY) (GZ) (HA) (HB) (HC) (HD) (HE) (HF) (HG) (HH) (HI) (HJ) (HK) (HL) (HM) (HN) (HO) (HP) (HQ) (HR) (HS) (HT) (HU) (HV) (HW) (HX) (HY) (HZ) (IA) (IB) (IC) (ID) (IE) (IF) (IG) (IH) (II) (IJ) (IK) (IL) (IM) (IN) (IO) (IP) (IQ) (IR) (IS) (IT) (IU) (IV) (IW) (IX) (IY) (IZ) (JA) (JB) (JC) (JD) (JE) (JF) (JG) (JH) (JI) (JJ) (JK) (JL) (JM) (JN) (JO) (JP) (JQ) (JR) (JS) (JT) (JU) (JV) (JW) (JX) (JY) (JZ) (KA) (KB) (KC) (KD) (KE) (KF) (KG) (KH) (KI) (KJ) (KK) (KL) (KM) (KN) (KO) (KP) (KQ) (KR) (KS) (KT) (KU) (KV) (KW) (KX) (KY) (KZ) (LA) (LB) (LC) (LD) (LE) (LF) (LG) (LH) (LI) (LJ) (LK) (LL) (LM) (LN) (LO) (LP) (LQ) (LR) (LS) (LT) (LU) (LV) (LW) (LX) (LY) (LZ) (MA) (MB) (MC) (MD) (ME) (MF) (MG) (MH) (MI) (MJ) (MK) (ML) (MN) (MO) (MP) (MQ) (MR) (MS) (MT) (MU) (MV) (MW) (MX) (MY) (MZ) (NA) (NB) (NC) (ND) (NE) (NF) (NG) (NH) (NI) (NJ) (NK) (NL) (NM) (NN) (NO) (NP) (NQ) (NR) (NS) (NT) (NU) (NV) (NW) (NX) (NY) (NZ) (OA) (OB) (OC) (OD) (OE) (OF) (OG) (OH) (OI) (OJ) (OK) (OL) (OM) (ON) (OO) (OP) (OQ) (OR) (OS) (OT) (OU) (OV) (OW) (OX) (OY) (OZ) (PA) (PB) (PC) (PD) (PE) (PF) (PG) (PH) (PI) (PJ) (PK) (PL) (PM) (PN) (PO) (PP) (PQ) (PR) (PS) (PT) (PU) (PV) (PW) (PX) (PY) (PZ) (QA) (QB) (QC) (QD) (QE) (QF) (QG) (QH) (QI) (QJ) (QK) (QL) (QM) (QN) (QO) (QP) (QQ) (QR) (QS) (QT) (QU) (QV) (QW) (QX) (QY) (QZ) (RA) (RB) (RC) (RD) (RE) (RF) (RG) (RH) (RI) (RJ) (RK) (RL) (RM) (RN) (RO) (RP) (RQ) (RR) (RS) (RT) (RU) (RV) (RW) (RX) (RY) (RZ) (SA) (SB) (SC) (SD) (SE) (SF) (SG) (SH) (SI) (SJ) (SK) (SL) (SM) (SN) (SO) (SP) (SQ) (SR) (SS) (ST) (SU) (SV) (SW) (SX) (SY) (SZ) (TA) (TB) (TC) (TD) (TE) (TF) (TG) (TH) (TI) (TJ) (TK) (TL) (TM) (TN) (TO) (TP) (TQ) (TR) (TS) (TT) (TU) (TV) (TW) (TX) (TY) (TZ) (UA) (UB) (UC) (UD) (UE) (UF) (UG) (UH) (UI) (UJ) (UK) (UL) (UM) (UN) (UO) (UP) (UQ) (UR) (US) (UT) (UU) (UV) (UW) (UX) (UY) (UZ) (VA) (VB) (VC) (VD) (VE) (VF) (VG) (VH) (VI) (VJ) (VK) (VL) (VM) (VN) (VO) (VP) (VQ) (VR) (VS) (VT) (VU) (VV) (VW) (VX) (VY) (VZ) (WA) (WB) (WC) (WD) (WE) (WF) (WG) (WH) (WI) (WJ) (WK) (WL) (WM) (WN) (WO) (WP) (WQ) (WR) (WS) (WT) (WU) (WV) (WW) (WX) (WY) (WZ) (XA) (XB) (XC) (XD) (XE) (XF) (XG) (XH) (XI) (XJ) (XK) (XL) (XM) (XN) (XO) (XP) (XQ) (XR) (XS) (XT) (XU) (XV) (XW) (XX) (XY) (XZ) (YA) (YB) (YC) (YD) (YE) (YF) (YG) (YH) (YI) (YJ) (YK) (YL) (YM) (YN) (YO) (YP) (YQ) (YR) (YS) (YT) (YU) (YV) (YW) (YX) (YY) (YZ) (ZA) (ZB) (ZC) (ZD) (ZE) (ZF) (ZG) (ZH) (ZI) (ZJ) (ZK) (ZL) (ZM) (ZN) (ZO) (ZP) (ZQ) (ZR) (ZS) (ZT) (ZU) (ZV) (ZW) (ZX) (ZY) (ZZ)

84. PENNSYLVANIA SCHOOL DISTRICT (IF APPLICABLE)

85. DESCRIPTION OF DAMAGED PROPERTY

OWNER

ADDRESS

PHONE

86. DIAGRAM (WITNESS RELEASE) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K) (L) (M) (N) (O) (P) (Q) (R) (S) (T) (U) (V) (W) (X) (Y) (Z) (AA) (AB) (AC) (AD) (AE) (AF) (AG) (AH) (AI) (AJ) (AK) (AL) (AM) (AN) (AO) (AP) (AQ) (AR) (AS) (AT) (AU) (AV) (AW) (AX) (AY) (AZ) (BA) (BB) (BC) (BD) (BE) (BF) (BG) (BH) (BI) (BJ) (BK) (BL) (BM) (BN) (BO) (BP) (BQ) (BR) (BS) (BT) (BU) (BV) (BW) (BX) (BY) (BZ) (CA) (CB) (CC) (CD) (CE) (CF) (CG) (CH) (CI) (CJ) (CK) (CL) (CM) (CN) (CO) (CP) (CQ) (CR) (CS) (CT) (CU) (CV) (CW) (CX) (CY) (CZ) (DA) (DB) (DC) (DD) (DE) (DF) (DG) (DH) (DI) (DJ) (DK) (DL) (DM) (DN) (DO) (DP) (DQ) (DR) (DS) (DT) (DU) (DV) (DW) (DX) (DY) (DZ) (EA) (EB) (EC) (ED) (EE) (EF) (EG) (EH) (EI) (EJ) (EK) (EL) (EM) (EN) (EO) (EP) (EQ) (ER) (ES) (ET) (EU) (EV) (EW) (EX) (EY) (EZ) (FA) (FB) (FC) (FD) (FE) (FF) (FG) (FH) (FI) (FJ) (FK) (FL) (FM) (FN) (FO) (FP) (FQ) (FR) (FS) (FT) (FU) (FV) (FW) (FX) (FY) (FZ) (GA) (GB) (GC) (GD) (GE) (GF) (GG) (GH) (GI) (GJ) (GK) (GL) (GM) (GN) (GO) (GP) (GQ) (GR) (GS) (GT) (GU) (GV) (GW) (GX) (GY) (GZ) (HA) (HB) (HC) (HD) (HE) (HF) (HG) (HH) (HI) (HJ) (HK) (HL) (HM) (HN) (HO) (HP) (HQ) (HR) (HS) (HT) (HU) (HV) (HW) (HX) (HY) (HZ) (IA) (IB) (IC) (ID) (IE) (IF) (IG) (IH) (II) (IJ) (IK) (IL) (IM) (IN) (IO) (IP) (IQ) (IR) (IS) (IT) (IU) (IV) (IW) (IX) (IY) (IZ) (JA) (JB) (JC) (JD) (JE) (JF) (JG) (JH) (JI) (JJ) (JK) (JL) (JM) (JN) (JO) (JP) (JQ) (JR) (JS) (JT) (JU) (JV) (JW) (JX) (JY) (JZ) (KA) (KB) (KC) (KD) (KE) (KF) (KG) (KH) (KI) (KJ) (KK) (KL) (KM) (KN) (KO) (KP) (KQ) (KR) (KS) (KT) (KU) (KV) (KW) (KX) (KY) (KZ) (LA) (LB) (LC) (LD) (LE) (LF) (LG) (LH) (LI) (LJ) (LK) (LL) (LM) (LN) (LO) (LP) (LQ) (LR) (LS) (LT) (LU) (LV) (LW) (LX) (LY) (LZ) (MA) (MB) (MC) (MD) (ME) (MF) (MG) (MH) (MI) (MJ) (MK) (ML) (MN) (MO) (MP) (MQ) (MR) (MS) (MT) (MU) (MV) (MW) (MX) (MY) (MZ) (NA) (NB) (NC) (ND) (NE) (NF) (NG) (NH) (NI) (NJ) (NK) (NL) (NM) (NN) (NO) (NP) (NQ) (NR) (NS) (NT) (NU) (NV) (NW) (NX) (NY) (NZ) (OA) (OB) (OC) (OD) (OE) (OF) (OG) (OH) (OI) (OJ) (OK) (OL) (OM) (ON) (OO) (OP) (OQ) (OR) (OS) (OT) (OU) (OV) (OW) (OX) (OY) (OZ) (PA) (PB) (PC) (PD) (PE) (PF) (PG) (PH) (PI) (PJ) (PK) (PL) (PM) (PN) (PO) (PP) (PQ) (PR) (PS) (PT) (PU) (PV) (PW) (PX) (PY) (PZ) (QA) (QB) (QC) (QD) (QE) (QF) (QG) (QH) (QI) (QJ) (QK) (QL) (QM) (QN) (QO) (QP) (QQ) (QR) (QS) (QT) (QU) (QV) (QW) (QX) (QY) (QZ) (RA) (RB) (RC) (RD) (RE) (RF) (RG) (RH) (RI) (RJ) (RK) (RL) (RM) (RN) (RO) (RP) (RQ) (RR) (RS) (RT) (RU) (RV) (RW) (RX) (RY) (RZ) (SA) (SB) (SC) (SD) (SE) (SF) (SG) (SH) (SI) (SJ) (SK) (SL) (SM) (SN) (SO) (SP) (SQ) (SR) (SS) (ST) (SU) (SV) (SW) (SX) (SY) (SZ) (TA) (TB) (TC) (TD) (TE) (TF) (TG) (TH) (TI) (TJ) (TK) (TL) (TM) (TN) (TO) (TP) (TQ) (TR) (TS) (TT) (TU) (TV) (TW) (TX) (TY) (TZ) (UA) (UB) (UC) (UD) (UE) (UF) (UG) (UH) (UI) (UJ) (UK) (UL) (UM) (UN) (UO) (UP) (UQ) (UR) (US) (UT) (UU) (UV) (UW) (UX) (UY) (UZ) (VA) (VB) (VC) (VD) (VE) (VF) (VG) (VH) (VI) (VJ) (VK) (VL) (VM) (VN) (VO) (VP) (VQ) (VR) (VS) (VT) (VU) (VV) (VW) (VX) (VY) (VZ) (WA) (WB) (WC) (WD) (WE) (WF) (WG) (WH) (WI) (WJ) (WK) (WL) (WM) (WN) (WO) (WP) (WQ) (WR) (WS) (WT) (WU) (WV) (WW) (WX) (WY) (WZ) (XA) (XB) (XC) (XD) (XE) (XF) (XG) (XH) (XI) (XJ) (XK) (XL) (XM) (XN) (XO) (XP) (XQ) (XR) (XS) (XT) (XU) (XV) (XW) (XX) (XY) (XZ) (YA) (YB) (YC) (YD) (YE) (YF) (YG) (YH) (YI) (YJ) (YK) (YL) (YM) (YN) (YO) (YP) (YQ) (YR) (YS) (YT) (YU) (YV) (YW) (YX) (YY) (YZ) (ZA) (ZB) (ZC) (ZD) (ZE) (ZF) (ZG) (ZH) (ZI) (ZJ) (ZK) (ZL) (ZM) (ZN) (ZO) (ZP) (ZQ) (ZR) (ZS) (ZT) (ZU) (ZV) (ZW) (ZX) (ZY) (ZZ)

87. NARRATIVE IDENTIFY PRECIPITATING EVENTS, CAUSATION FACTORS, SEQUENCE OF EVENTS, WITNESS STATEMENTS, AND PROVIDE ADDITIONAL DETAILS LIKE INSURANCE INFORMATION AND LOCATION OF INVOLVED VEHICLES, IF KNOWN.

UNIT #1 WAS TRAVELING EAST IN THE LEFT LANE OF BY-PASS EAST BOUND LANES. UNIT #2 WAS TRAVELING WEST IN THE LEFT LANE OF BY-PASS WEST BOUND LANES. UNIT #1 TRAVELED INTO THEN ACROSS THE GRASS MEDIAL STRIP ON US BY-PASS. UNIT #1 TRAVELED INTO THE WEST BOUND BOUND LANES OF US BY-PASS, HEADED IN A NORTH EASTERLY DIRECTION. THE FRONT LEFT OF UNIT #1 STRUCK THE LEFT FRONT OF UNIT #2 IN THE WEST BOUND LANES. THE FRONT LEFT OF UNIT #1 TRAVELED ALONG THE LEFT SIDE OF UNIT #2 IN CONTACT THE ENTIRE LENGTH OF UNIT #2. THE UNITS THEN SEPARATED. AFTER IMPACT UNIT #1 TRAVELED EAST IN THE WEST BOUND LANES OF US BY-PASS FOR APPROX. 75 FT. UNIT #1 THEN TRAVELED INTO THE GRASS MEDIAL AND TRAVELED APPROX. 99 FT. BEFORE COMING TO REST FACING EAST IN THE MEDIAL. AFTER IMPACT UNIT #2 (IN AN UNKNOWN ORDER) SLID ON ITS RIGHT SIDE AND FLIPPED.

(MORE)

INSURANCE INFORMATION		COMPANY		INSURANCE INFORMATION		COMPANY	
UNIT 1	POLICY NO			UNIT 2	POLICY NO		
NAME		ADDRESS		NAME		ADDRESS	
PHONE				PHONE			

88. WITNESSES

NAME		ADDRESS		PHONE	

89. VIOLATIONS INDICATED

90. SECTION NUMBERS (ONLY IF CHARGED)

TC NTC

UNIT 1	DRIVING ON DIVIDED HIGHWAYS		
UNIT 2	ALONG		

01. PRIMARY USE		02. TYPE TEST		03. RESULTS		01. PRIMARY USE		02. TYPE TEST		03. RESULTS		04. INVESTIGATION COMPLETE	
UNIT 1	0	0	0	0	0	UNIT 2	0	0	0	0	0	YES	NO

BEST AVAILABLE COPY

REPORTABLE ☒ NON-REPORTABLE ☐

INCIDENT NUMBER	ACCIDENT DATE	COUNTY CODE	MUNICIPAL CODE
	92		101

[illegible]

87. NARRATIVE:
THAT HE WAS DIRECTLY IN FRONT OF UNIT[#] 2 IN THE LEFT LN. [REDACTED] STATED THAT HE HAD HIS CRUISE CONTROL SET ON 60 MPH AND UNIT[#] 2 WAS WITH HIM. [REDACTED] STATED THAT HE SAW A DARK VAN COME OVER THE MEDIAL AND HIT THE BLUE VAN (UNIT[#] 2). [REDACTED] STATED THAT THE BLUE VAN (UNIT[#] 2) ROLLED AFTER IMPACT. [REDACTED] WAS INTERVIEWED AT THE SCENE AT APPROX [REDACTED] HRS. [REDACTED] '92.

WITNESS [REDACTED] STATED THAT SHE WAS BEHIND UNIT #2 BUT WAS NOT CLOSE. SEIVERO STATED THAT SHE WAS IN THE RIGHT LANE SEIVERO STATED THAT UNIT #2 WAS IN THE LEFT LN. SEIVERO STATED SHE SAW UNIT #1 COME ACROSS THE MEDIAL FROM THE LEFT LANE AND HIT UNIT #2. SEIVERO STATED UNIT #2 KEPT FLIPPING AFTER IMPACT. SEIVERO WAS INTERVIEWED AT THE SCENE AT APPROX [REDACTED] HRS [REDACTED].

WITNESS [REDACTED] PH [REDACTED]
STATED THAT UNIT "1" CAUSED THE MEDICAL VAN HIS UNIT "A" IN THE LEFT LANE. CHAMOSSE
STATED THAT THE BLUE VAN (UNIT "2") TUMBLED FOR 100 YDS. CHAMOSSE WAS INTERVIEWED AT
THE SCENE AT APPROX. [REDACTED] HRS. [REDACTED] '72.

AN ADDITIONAL WITNESS WAS INTERVIEWED BY TPA ~~XXXXXXXXXX~~ ASP/~~XXXXXXXXXX~~ SET
ATTACHED SUPPLEMENT.

NEWS RELEASE PREPARED [REDACTED] 72

WARNING ISSUED

SP7-6018 ISSUED TO BOTH OPERATORS.

NOTED BY [REDACTED] COMPLETED ON 1/42 REF. 2114 1545.

REPORT # [REDACTED]

90. DESCRIBE VIOLATIONS				90. SECTION NUMBERS (ONLY IF CHARGED):				TC NTC	
UNIT 1								<input type="checkbox"/> <input type="checkbox"/>	
UNIT 2								<input type="checkbox"/> <input type="checkbox"/>	
91. PROBABLE - USE	92. TYPE TEST	93. RESULTS 0. ____ % <input type="checkbox"/> NO TEST <input type="checkbox"/> REFUSE <input type="checkbox"/> LINK	UNIT 1	91. PROBABLE USE	92. TYPE TEST	93. RESULTS 0. ____ % <input type="checkbox"/> NO TEST <input type="checkbox"/> REFUSE <input type="checkbox"/> LINK	UNIT 2	94. INVESTIGATION COMPLETE ? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	

BEST AVAILABLE COPY

COMMONWEALTH OF PENNSYLVANIA POLICE ACCIDENT SUPPLEMENTAL

(XX) REFER TO OVERLAY SHEETS

REPORTABLE ☒ NON-REPORTABLE ☐

PENNDOT LINE ONLY

1. INCIDENT NUMBER		9. ACCIDENT DATE		10. DAY OF WEEK	
2. AGENCY NAME		11. TIME OF DAY		12. NUMBER OF UNITS	
3. STATION/ PRECINCT		4. PATROL ZONE		13. # KILLED	
5. INVESTIGATOR		BADGE NUMBER		14. # INJURED	
8. APPROVED BY		BADGE NUMBER		15. PRIV. PROP. ACCIDENT	
				CODE	
				CODE	

UNIT #: - COMPLETE ONLY THE INFORMATION THAT HAS CHANGED SINCE ORIGINAL REPORT

36. LEGALLY PARKED		37. REG. PLATE		38. STATE	
39. PA TITLE OR OUT-OF-STATE VIN		40. OWNER		41. OWNER ADDRESS	
42. CITY, STATE & ZIP CODE		43. YEAR		44. MAKE	
45. MODEL (NOT BODY TYPE)		46. INSURANCE		47. BODY TYPE	
48. SPECIAL USAGE		49. VEHICLE OWNERSHIP		50. INITIAL IMPACT POINT	
51. VEHICLE STATUS		52. TRAVEL SPEED		53. VEHICLE GRADIENT	
54. DRIVER PRESENCE		55. DRIVER CONDITION		56. DRIVER NUMBER	
57. STATE		58. DRIVER NAME		59. DRIVER ADDRESS	
60. CITY, STATE & ZIP CODE		61. SEX		62. DATE OF BIRTH	
63. PHONE		64. COMM VEH		65. DRIVER CLASS	
66. DRIVER S.S. #		67. CARRIER		68. CARRIER ADDRESS	
69. CITY, STATE & ZIP CODE		70. USDOT #		71. ICC #	
72. VEHICLE CONFIG.		73. CARGO BODY TYPE		74. GVWR	
75. NO. OF AXLES		76. HAZ ARDOUS MATERIALS		77. RELEASE OF HAZ MAT	

67. NARRATIVE - IDENTIFY PRECIPITATING EVENTS, CAUSATION FACTORS, SEQUENCE OF EVENTS, WITNESS STATEMENTS, AND PROVIDE ADDITIONAL DETAILS

AT [REDACTED] HAS. THIS OFFICER WAS DISPATCHED TO THE LOCATION OF THIS M.V.A. TO ASSIST. TPR [REDACTED]. AT [REDACTED] HAS. THIS OFFICER ARRIVED.

AT [REDACTED] THIS OFFICER INTERVIEWED THE FOLLOWING WITNESS. [REDACTED] DOM [REDACTED] BO [REDACTED] P.O.E. [REDACTED] STATED: I WAS A LITTLE BIT BEHIND THE CAR. I DIDN'T SEE ANY CAR CUT ME OFF. THE CAR WHO CAME ACROSS THE GRASS WAS IN THE LEFT LANE & THE CAR WHO HIT WAS IN THE LEFT LANE. THEY HIT IN THE LEFT LANE OF THE HIGHWAY GOING WEST.

INTERVIEW CONCLUDED AT [REDACTED] HAS.

THIS OFFICER THEN CONTINUED TO SEARCH [REDACTED] SCENE & ADVISED FOR [REDACTED] TO REMOVE THE VEHICLES.

HIGHWAY WAS RE-OPENED AT [REDACTED] HAS.

INSURANCE INFORMATION		COMPANY		94. INVESTIGATION COMPLETE?	
UNIT NO		POLICY NO		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	

**ACCIDENT LOCATION
FIELDS****28. TYPE HIGHWAY**

- 0 - NOT PHYSICALLY DIVIDED
- 1 - DIVIDED HIGHWAY - MEDIAN STRIP WITHOUT TRAFFIC BARRIER
- 2 - DIVIDED HIGHWAY - MEDIAN STRIP WITH TRAFFIC BARRIER
- N - ONE WAY TRAFFIC NORTH
- S - ONE WAY TRAFFIC SOUTH
- E - ONE WAY TRAFFIC EAST
- W - ONE WAY TRAFFIC WEST

29. ACCESS CONTROL

- 1 - NO CONTROLS (UNLIMITED ACCESS)
- 2 - FULL CONTROL (ONLY RAMP ENTRY AND EXIT)
- 8 - OTHER
- 9 - UNKNOWN

34. CONSTRUCTION ZONE

- 0 - NOT APPLICABLE
- 1 - CONSTRUCTION ZONE
- 2 - MAINTENANCE ZONE
- 3 - UTILITY COMPANY WORK
- 9 - UNKNOWN

TRAFFIC CONTROL DEVICE

- 0 - NO CONTROLS
- 1 - FLASHING SIGNALS
- 2 - TRAFFIC SIGNAL
- 3 - STOP SIGN
- 4 - YIELD SIGN
- 5 - RR CROSSING
- 6 - POLICE OFFICER OR FLAGMAN
- 7 - FLASHING SCHOOL ZONE
- 8 - OTHER
- 9 - UNKNOWN

UNIT INFORMATION FIELDS**BODY TYPE****AUTOMOBILES**

- 01 - CONVERTIBLE
- 02 - 2 DOOR
- 03 - 3 DOOR (HATCH BACK, 2 DR)
- 04 - 4 DOOR
- 05 - 5 DOOR (HATCH BACK, 4 DR)
- 06 - STATION WAGON
- 07 - HATCH BACK
- NUMBER DOORS UNKNOWN

47. BODY TYPE (CONTINUED)**AUTOMOBILES CONTINUED**

- 08 - OTHER AUTOMOBILE
- 09 - UNKNOWN AUTOMOBILE
- 10 - AUTOMOBILE BASED PICK-UP
- 11 - AUTOMOBILE BASED PANEL
- 12 - SHORT UTILITY
- 13 - LARGE LIMOUSINE
- 14 - THREE WHEEL AUTO OR DERIVATIVE

MOTORCYCLES

- 20 - MOTORCYCLE
- 21 - MOPED
- 27 - THREE WHEEL MOTORCYCLE OR MOPED
- 28 - MINIBIKE, MOTORSCOOTER
- 29 - UNKNOWN MOTORCYCLE

BUSES

- 30 - SCHOOL BUS
- 31 - CROSS COUNTRY/INTERCITY
- 32 - TRANSIT BUS
- 38 - OTHER BUS
- 39 - UNKNOWN BUS TYPE

VANS

- 40 - VAN
- 41 - VAN COMMERCIAL CUTAWAY
- 42 - VAN BASED MOTORHOME
- 48 - OTHER VAN TYPE
- 49 - UNKNOWN VAN TYPE

LIGHT TRUCKS (GVWR < 10,000#)

- 50 - PICK-UP
- 51 - PICKUP WITH SLIDE IN CAMPER
- 52 - PICKUP BASED MOTORHOME
- 53 - CAB CHASSIS BASED
- 54 - TRUCK BASED PANEL
- 55 - TRUCK BASED STATION WAGON
- 56 - TRUCK BASED UTILITY
- 58 - OTHER LIGHT TRUCK
- 59 - UNKNOWN LIGHT TRUCK TYPE
- 67 - STATIONWAGON - BASE BODY TYPE UNKNOWN
- 68 - UTILITY - BASE BODY TYPE UNKNOWN
- 69 - UNKNOWN LIGHT TRUCK

MEDIUM/HEAVY TRUCKS

- 70 - SINGLE UNIT STRAIGHT TRUCK
- 73 - MEDIUM/HEAVY TRUCK BASED MOTORHOME
- 74 - TRUCK TRACTOR (CAB)
- 75 - UNKNOWN IF SINGLE UNIT OR COMBINATION TRUCK
- 77 - CAMPER OR MOTORHOME UNKNOWN TRUCK TYPE
- 79 - UNKNOWN TRUCK TYPE

47. BODYTYPE (CONTINUED)**OTHER MOTORIZED VEHICLE**

- 80 - SNOWMOBILE
- 81 - FARM EQUIPMENT
- 82 - ATV
- 83 - CONSTRUCTION EQUIPMENT
- 88 - OTHER UNSPECIFIED VEHICLE
- 89 - UNKNOWN OTHER MOTORIZED VEHICLES

NON-MOTORIZED UNITS

- 90 - UNICYCLE, BICYCLE, TRICYCLE
- 91 - OTHER PEDALCYCLE (BIG WHEEL)
- 92 - UNKNOWN PEDALCYCLE
- 93 - HORSE AND BUGGY
- 94 - HORSE AND RIDER

TRACK VEHICLES

- 95 - TRAIN
- 96 - TROLLEY

IF NOTHING ELSE

- 98 - OTHER BODY TYPE
- 99 - UNKNOWN BODY TYPE

48. SPECIAL USAGE

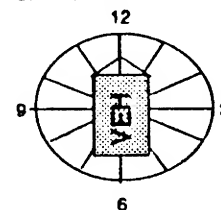
- 0 - NOT APPLICABLE
- 1 - PUPIL TRANSPORT
- 2 - FIRE VEHICLE
- 3 - AMBULANCE
- 4 - OTHER EMERGENCY VEHICLE
- 5 - POLICE VEHICLE
- 6 - TRACTOR TRAILER
- 7 - TWIN TRAILER
- 11 - COMMERCIAL PASSENGER
- 12 - TOWING PASSENGER VEHICLE
- 13 - TOW TRUCK
- 14 - TOWING UTILITY TRAILER
- 15 - TOWING MOBILE OR MODULAR HOME
- 16 - TOWING CAMPER
- 20 - MODIFIED VEHICLE

49. VEHICLE OWNERSHIP

- 1 - PRIVATE VEHICLE OWNED BY DRIVER
- 2 - PRIVATE VEHICLE OWNED BY ANOTHER
- 3 - RENTED VEHICLE
- 4 - STATE POLICE VEHICLE
- 5 - PENNDOT VEHICLE
- 6 - OTHER COMMONWEALTH VEH.
- 7 - MUNICIPAL POLICE VEHICLE
- 8 - OTHER MUNICIPAL GOVT VEH
- 9 - FEDERAL GOVERNMENT VEH
- 10 - COMMERCIAL VEHICLE
- 11 - PUPIL TRANSPORT CARRIER
- 98 - OTHER
- 99 - UNKNOWN

50. INITIAL IMPACT POINT

- 0 - NO IMPACT OR CONTACT
- 1 - 12 CLOCK POINTS
- 13 - TOP
- 14 - UNDERCARRIAGE
- 15 - TOWED UNIT
- 99 - UNKNOWN

**51. VEHICLE STATUS**

- 0 - NOT APPLICABLE
- 1 - LEGALLY PARKED
- 2 - ILLEGALLY PARKED - ON ROAD
- 3 - ILLEGALLY PARKED - OFF ROAD
- 4 - HIT AND RUN
- 5 - DISABLED FROM PREVIOUS ACCIDENT

52. TRAVEL SPEED

- 00 - STOPPED OR PARKED
- 01 - 97 ACTUAL OR ESTIMATED SPEED
- 98 - 98 MPH OR GREATER
- 99 - UNKNOWN

53. VEHICLE GRADIENT

- 1 - LEVEL ROADWAY
- 2 - UP HILL
- 3 - DOWN HILL
- 4 - SAG (BOTTOM OF HILL)
- 5 - CREST (TOP OF HILL)

IF DRIVER PRESENCE = 2, THEN DO NOT ENTER DATA FOR THE OPERATOR

54. DRIVER PRESENCE

- 1 - DRIVER OPERATED VEHICLE
- 2 - DRIVERLESS VEHICLE
- 3 - DRIVER LEFT SCENE (AFTER ACCIDENT)

55. DRIVER CONDITION

- 1 - APPEARED NORMAL
- 2 - HAD BEEN DRINKING
- 3 - ILLEGAL DRUG USE
- 4 - SICK
- 5 - FATIGUE
- 6 - ASLEEP
- 7 - MEDICATION
- 9 - UNKNOWN

POLICE ACCIDENT REPORT - Overlay Sheet - 2

BEST AVAILABLE COPY

72. VEHICLE CONFIGURATION 1 - BUS 2 - SINGLE UNIT - (2 AXLES, 6 TIRES) 3 - SINGLE UNIT (3 + AXLES) 4 - TRUCK TRACTOR (BOBTAIL) 5 - TRUCK TRAILER 6 - TRACTOR/SEMI-TRAILER 7 - TRACTOR/DOUBLES 8 - TRACTOR/TRIPLES 9 - UNKNOWN HEAVY TRUCK	80. UNIT NUMBERS - BLOCK A CODE UNIT NUMBERS AS RECORDED ON PAGE 1.	80. TYPE OF INJURY - BLOCK I 0 - NO INJURY 1 - AMPUTATION 2 - BLEEDING WOUND 3 - BROKEN BONES 4 - DISTORTED MEMBER 5 - BRUISES/ABRASIONS 6 - BURNS 7 - SWELLING 8 - LIMPING 9 - COMPLAINT OF PAIN 97 - OTHER INCAPACITATING INJURY 98 - OTHER NON-INCAPACITATING 99 - UNKNOWN	(CONTINUED FROM BELOW) - BLOCK M 2 - HELICOPTER 3 - FIRE RESCUE VEHICLE 4 - PRIVATE VEHICLE 5 - POLICE VEHICLE 8 - OTHER 9 - UNKNOWN
73. CARGO BODY TYPE 1 - BUS 2 - VAN / ENCLOSED BOX 3 - CARGO TANK 4 - FLATBED 5 - DUMP 6 - CONCRETE MIXER 7 - AUTO TRANSPORT 8 - GARBAGE / REFUSE 9 - OTHER / UNKNOWN	80. SEAT POSITION - BLOCK B 1 - DRIVER 2 - MIDDLE FRONT 3 - RIGHT FRONT 4 - LEFT REAR 5 - MIDDLE REAR 6 - RIGHT REAR 7 - PEDESTRIAN 8 - OTHER SEAT POSITION 9 - UNKNOWN	80. AREA OF APPARENT INJURY - BLOCK J 0 - NO INJURY 1 - FACE 2 - HEAD 3 - NECK 4 - BACK 5 - ARM(S) 6 - LEG(S) 7 - CHEST/STOMACH 8 - INTERNAL 9 - ENTIRE BODY 98 - OTHER AREAS 99 - UNKNOWN	81. ILLUMINATION 1 - DAWN 2 - DAYLIGHT 3 - DARK - STREET LIGHTS 4 - DARK - NO STREET LIGHTS 5 - DUSK
76. HAZARDOUS MATERIALS CODE THE 4 DIGIT HAZARDOUS MATERIAL CODE ON THE PLACARD OR SELECT ONE OF THE FOLLOWING CODES TO REPRESENT THE PLACARD. 00 - NOT APPLICABLE 01 - NON-FLAMMABLE GAS 02 - COMBUSTIBLE 03 - ORGANIC PEROXIDE 04 - CORROSIVE 05 - EXPLOSIVES "A" 06 - OXYGEN 07 - POISON 08 - EXPLOSIVES "B" 09 - CHLORINE 10 - OXIDIZER 11 - POISONOUS GAS 12 - FUEL OIL 13 - DANGEROUS 14 - RADIOACTIVE 15 - FLAMMABLE SOLID "W" 16 - FLAMMABLE 17 - FLAMMABLE GAS 18 - FLAMMABLE SOLID 19 - GASOLINE 20 - BLASTING AGENT 98 - OTHER/NOT SIGNED 99 - UNKNOWN OR CODE THE 1 DIGIT HAZARDOUS MATERIAL CODE ON THE PLACARD	80. SEX - BLOCK C M - MALE F - FEMALE U - UNKNOWN	80. INJURY INFORMATION SOURCE - BLOCK K N - NOT APPLICABLE A - OBSERVATION OF OFFICER B - STATEMENT FROM INDIVIDUAL C - MEDICAL/PARAMEDICAL PERSONNEL	82. WEATHER 0 - NO ADVERSE CONDITIONS 1 - RAINING 2 - SLEET, HAIL, FREEZING RAIN 3 - SNOWING 4 - FOG, SMOKE 5 - RAIN AND FOG
	80. AGE - BLOCK D CODE ACTUAL AGE, EXCEPT FOR 1 - FOR INFANTS UP TO AGE 2 98 - AGE 98 OR GREATER 99 - UNKNOWN	80. EJECTION/EXTRICATION - BLOCK L 0 - NOT APPLICABLE 1 - TOTALLY EJECTED 2 - PARTIALLY EJECTED 3 - PARTIALLY EJECTED REQUIRING EXTRICATION 4 - EXTRICATION BY PERSONS UNKNOWN 5 - EXTRICATION - TWO OR MORE TYPES 6 - EXTRICATION BY AMBULANCE OR RESCUE PERSONNEL 7 - EXTRICATION BY POLICE 8 - EXTRICATION BY SELF 9 - UNKNOWN EJECTION OR EXTRICATION	83. ROAD SURFACE CONDITIONS 1 - DRY 2 - WET 3 - MUDDY 4 - SNOW COVERED 5 - ICE COVERED 6 - PLOWED SNOW 7 - SALTED & CINDERED 8 - ICE PATCHES
	80. ACTIVE RESTRAINT TYPE - BLOCK E 0 - NONE OR PEDESTRIAN 1 - SHOULDER HARNESS ONLY 2 - SEAT BELT ONLY 3 - COMBINATION (HARNESS & BELT) 4 - CHILD RESTRAINT DEVICE 7 - HELMET 8 - OTHER 9 - UNKNOWN	80. INJURY TRANSPORTATION - BLOCK M 0 - NOT APPLICABLE 1 - AMBULANCE (CONT'D ABOVE)	91. PROBABLE USE (ALCOHOL OR DRUGS) 0 - NONE 1 - ALCOHOL 2 - CONTROLLED SUBSTANCES 3 - OTHER DRUGS 4 - BOTH ALCOHOL AND DRUGS 9 - UNKNOWN
	80. ACTIVE RESTRAINT USAGE - BLOCK F 0 - NOT APPLICABLE 1 - IN USE 2 - NOT IN USE 9 - UNKNOWN		92. TYPE TEST 0 - NOT APPLICABLE NO TEST GIVEN 1 - BLOOD 2 - BREATH 3 - URINE 4 - TEST REFUSED 8 - OTHER 9 - UNKNOWN
	80. PASSIVE RESTRAINT TYPE - BLOCK G 0 - NONE OR PEDESTRIAN 1 - AIRBAG (DEPLOYED) 2 - AIR BAG (NOT DEPLOYED) 3 - AUTOMATIC SEAT BELT 8 - OTHER 9 - UNKNOWN		93. RESULTS (ALCOHOL TEST) CODE ACTUAL TEST RESULT E.G. 197 GRAMS = 0.20% (MOVE 3 DECIMAL PLACES AND ROUND)
	80. INJURY SEVERITY - BLOCK H 0 - NO INJURY 1 - DEATH 2 - MAJOR INJURY 3 - MODERATE INJURY 4 - MINOR INJURY 9 - UNKNOWN		

APPENDIX B

CRASHPC Output (Damage Algorithm)

SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

92-10

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL (KPH)	LONG. (KPH)	LAT. (KPH)	ANG. (DEG)
	VEH #1	23.3	-21.1	-9.8	25.0
	VEH #2	22.8	-13.1	18.7	-55.0

ENERGY DISSIPATED BY DAMAGE VEH#1: 64602.2 JOULES VEH#2: 41102.6 JOULES

SUMMARY OF DAMAGE DATA
VEHICLE # 1(* INDICATES DEFAULT VALUE)
VEHICLE # 2

TYPE-----CATEGORY 4
 STIFFNESS---CATEGORY 7
 WEIGHT-----1541.3 KGS
 CDC-----01FLEW2
 L-----154.9 CM.
 C1-----41.7 CM.
 C2-----32.0 CM.
 C3-----20.1 CM.
 C4-----9.9 CM.
 C5-----2.3 CM.
 C6-----0.0 CM.
 D-----25.4 CM.
 RHO-----1.00 *
 ANG-----25.0 DEG.
 D'-----59.9 CM.

TYPE-----CATEGORY 4
 STIFFNESS---CATEGORY 4
 WEIGHT-----1572.6 KGS
 CDC-----10LDEW3
 L-----330.5 CM.
 C1-----4.4 CM.
 C2-----14.6 CM.
 C3-----19.0 CM.
 C4-----20.1 CM.
 C5-----14.2 CM.
 C6-----0.0 CM.
 D-----38.4 CM.
 RHO-----1.00 *
 ANG-----55.0 DEG.
 D'-----42.9 CM.

DIMENSIONS AND INERTIAL PROPERTIES

A1 = 138.9 CM.
 B1 = 150.4 CM.
 TR1 = 157.0 CM.
 I1 = 373422.3 NEWT-SEC**2-CM
 M1 = 15.472 NEWT-SEC**2/CM
 XF1 = 251.0 CM.
 XR1 = -289.6 CM.
 YS1 = 97.8 CM.

A2 = 138.9 CM.
 B2 = 150.4 CM.
 TR2 = 157.0 CM.
 I2 = 381005.1 NEWT-SEC**2-CM
 M2 = 15.786 NEWT-SEC**2/CM
 XF2 = 251.0 CM.
 XR2 = -289.6 CM.
 YS2 = 97.8 CM.

SUMMARY OF CRASHPC RESULTS (USING SPINOUT)

92-10

SPEED CHANGE (DAMAGE)	VEH #1	TOTAL (MPH)	LONG. (MPH)	LAT. (MPH)	ANG. (DEG)
	VEH #1	14.4	-13.1	-6.1	25.0
	VEH #2	14.2	-8.1	11.6	-55.0

ENERGY DISSIPATED BY DAMAGE VEH#1: 47641.8 FT-LB VEH#2: 30311.7 FT-LB

SUMMARY OF DAMAGE DATA
VEHICLE # 1(* INDICATES DEFAULT VALUE)
VEHICLE # 2

TYPE-----CATEGORY 4
 STIFFNESS---CATEGORY 7
 WEIGHT----- 3398.0 LBS.
 CDC-----OIFLEW2
 ----- 61.0 IN.
 C1----- 16.4 IN.
 C2----- 12.6 IN.
 C3----- 7.9 IN.
 C4----- 3.9 IN.
 C5----- .9 IN.
 C6----- .0 IN.
 D----- -10.0
 RHO----- 1.00
 ANG----- 25.0 DEG.
 D'----- -23.6 IN.

TYPE-----CATEGORY 4
 STIFFNESS---CATEGORY 4
 WEIGHT----- 3467.0 LBS.
 CDC-----10LDEW3
 L----- 130.1 IN.
 C1----- 1.8 IN.
 C2----- 5.8 IN.
 C3----- 7.5 IN.
 C4----- 7.9 IN.
 C5----- 5.6 IN.
 C6----- .0 IN.
 D----- -15.1
 RHO----- 1.00
 ANG----- -55.0 DEG.
 D'----- -16.9 IN.

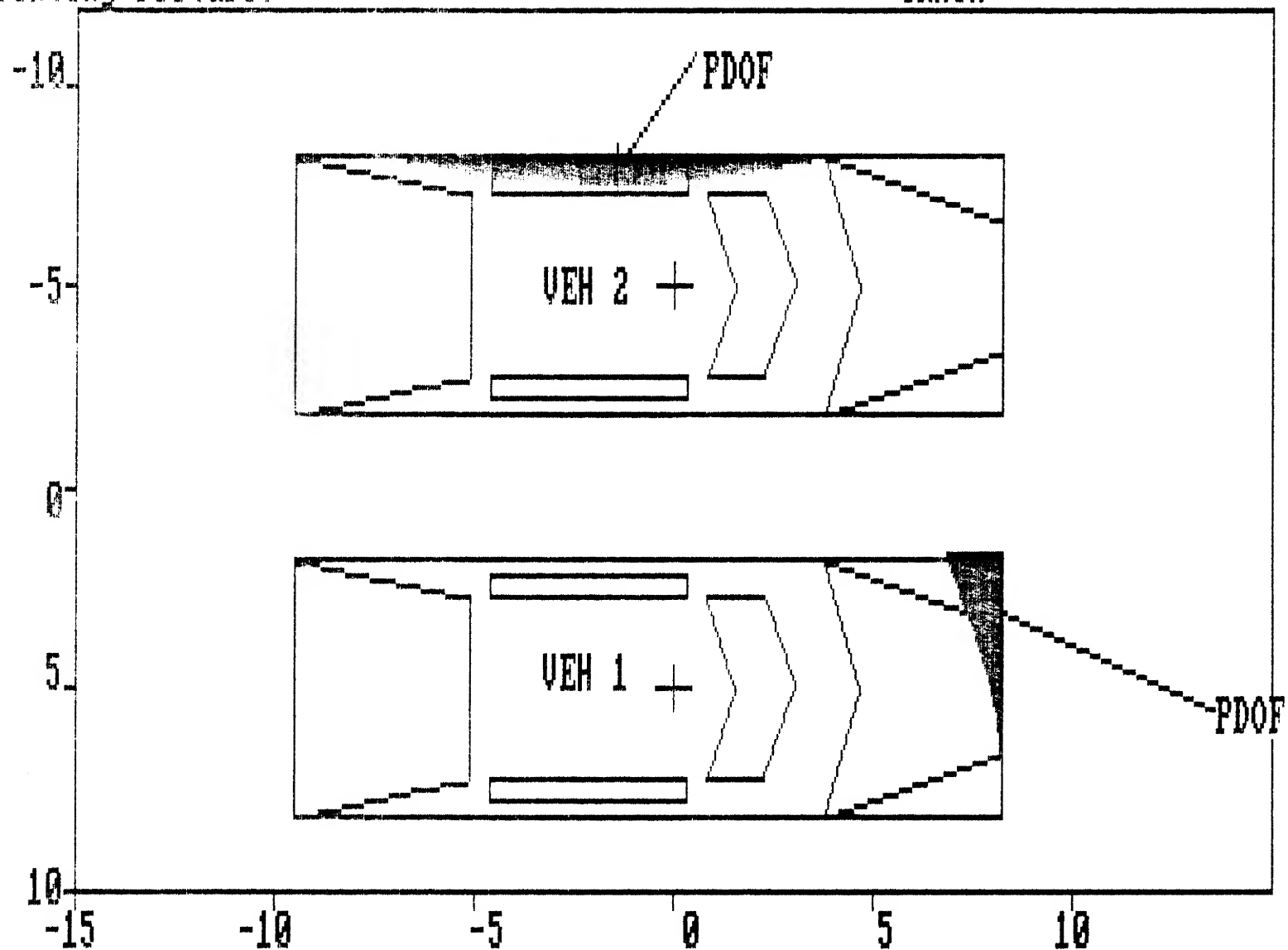
DIMENSIONS AND INERTIAL PROPERTIES

A1 = 54.7 IN.
 B1 = 59.2 IN.
 TR1 = 61.8 IN.
 Y1 = 33052.3 LB-SEC**2-IN
 X1 = 8.835 LB-SEC**2/IN
 XF1 = 98.8 IN.
 XR1 = -114.0 IN.
 YS1 = 38.5 IN.

A2 = 54.7 IN.
 B2 = 59.2 IN.
 TR2 = 61.8 IN.
 Y2 = 33723.5 LB-SEC**2-IN
 X2 = 9.015 LB-SEC**2/IN
 XF2 = 98.8 IN.
 XR2 = -114.0 IN.
 YS2 = 38.5 IN.

Printing Picture:

CRASH



DAMAGE DESCRIPTION

APPENDIX C

Air Bag Supplement

ACCIDENT SUMMARY

ACCIDENT DATE 1/1/92

POLICE INVESTIGATED (1,2,9)*

City ██████████ County ██████████

GENERAL LOCALITY

- (1) Freeway, Limited Access
- (2) Urban (City)
- (3) Urban-Rural (mixed)
- (4) Rural, Fields

CONFIGURATION (First Harm)

- (0) Struck Object or Pedestrian
- (1) Rear-End
- (2) Head-On
- (3) Rear-to-Rear
- (4) Angle
- (5) Sideswipe-Same Direction
- (6) Sideswipe-Opposite Direct.
- (7) NonColl:eg Fell from Veh
- (8) NonImpact Deployment
- (9) Unknown

FIRE INVOLVED (0) None

- (1) AirBag Vehicle
(2) Other Vehicle
(3) Both Vehicles
(9) Unknown

NUMBER: VEHICLES INVOLVED

(8) = 8 or more

PERSONS INVOLVED

INJURED PERSONS

MAXIMUM AIS IN ACCIDENT

OTHER VEHICLE: MAXIMUM AIS

PRIME/DEPLOY IMPACT w AB VEH:
EVENT NUMBER

CDC 1 0 - 4 D E W - 3

TOTAL DELTA-V 14.2 mph

Model Year, Make, Model, Body Type:

1988 DODGE CARAVAN

AIRBAG VEHICLE INSPECTION

DATE VEH. INSPECTED 11/19/92

REASON VEHICLE NOT INSPECTED

- (0) Not Required
(1) Inspection Completed
(2) Cannot be Located**
(3) Repaired or Destroyed**
(5) Refusal or Impounded**
(7) Other*

****Specify:**

IMPACT DATA OBTAINED

- (0) No Data Obtained
- (1) CDC Only
- (2) Crush Profile Only
- (3) Trajectory Data Only
- (4) CDC and Crush Profile
- (5) CDC and Trajectory
- (6) Crush and Trajectory
- (7) CDC, Crush & Trajectory

BASIS OF DELTA-V

- (0) Not Computed (Unknown Why)
- (1) CRASH - Damage Only
- (2) CRASH - Damage+Trajectory
- (3) Missing Vehicle Algorithm
- (4) Yielding Object Algorithm
- (5) Unknown Basis
- (6) One Vehicle Beyond Scope
- (7) Collision Beyond Scope
- (8) Insufficient Data

VEHICLE HISTORY

HAS AIRBAG VEHICLE BEEN IN
ANY PRIOR IMPACTS (1,2,9)*

HAS ANY PRIOR MAINTENANCE/SERVICE
BEEN PERFORMED ON SYSTEM(1,2,9)*

*Describe:

AIRBAG VEHICLE: FLEET PRIVATE CHRYSLER

VIN 2G4GK2 [REDACTED]

MILEAGE 8286 miles

SYSTEM READINESS LAMP
(In Instrument Cluster)

PRE-IMPACT LAMP CONDITION

- (1) Functioning/ProvedOut
(2) Inoperative
(9) Unknown

DRIVER'S REPORT OF
PRE-IMPACT FLASHING

- (00) No Flashing Reported
(01) Continuous Flashing
(02)
-- >Number of Flashes
(11)
(12) Constant Light
(19) Flashing, Unkn Number
(88) Not App (system removed)
(99) Unknown

PERIOD OF PRE-IMPACT FLASHING

- (0) No Flashing
(1) Same Day as Impact
(2) Prior Day
(3) Prior Two Days
(4) Prior Week
(5) Prior Month
(6) Over One Month
(9) Unknown

POST-IMPACT LAMP CONDITION

- (1) Functioning/ProvedOut
(2) Inoperative NO POWER
(9) Unknown

POST-IMPACT FLASHING

- (00) No Flashing
(01) Continuous Flashing
(02)
-- >Number of Flashes
(11)
(12) Constant Light
(19) Flashing, Unkn Number
(88) Not Appl (removed)
(99) Unknown

AIRBAG VEHICLE
FIRST HARMFUL EVENT

13

- (01) Fire or explosion
(02) Immersion
(03) Gas Inhalation
(04) Fell from vehicle
(05) Injured in vehicle
(06) Other noncollision (specify):
(07) Overturn
(08) Jackknife with intraunit damage
Collision With:
(09) Pedestrian
(10) Pedalcyclist
(11) Railway train
(12) Animal
(13) Motor vehicle in transport (same roadway)
(14) Motor vehicle in transport (other roadway)
(15) Parked motor vehicle
(16) Other type nonmotorist (specify):
(17) Thrown or falling object
(18) Boulder
Collision with Fixed Object:
(20) Building
(21) Impact attenuator/Crash Cushion
(22) Bridge pier or abutment
(23) Bridge parapet end
(24) Bridge rail
(25) Guardrail
(26) Concrete traffic barrier
(27) Median barrier
(28) Other longitudinal barrier (specify):
(29) Highway/Traffic sign post
(30) Overhead sign support
(31) Luminaire/Light support
(32) Utility pole
(33) Other post, pole, or support (specify):
(34) Culvert
(35) Curb
(36) Ditch
(37) Embankment-earth
(38) Embankment-rock, stone or concrete
(39) Fence (wooden, wire, chain link, etc.)
(40) Wall (stone, rock, metal, etc.)
(41) Fire hydrant
(42) Shrubbery
(43) Tree
(44) Other fixed object (specify):
(45) Pavement surface irregularity (pothole, grooved, grates)
(99) Unknown

AIRBAG VEHICLE IMPACT SUMMARY

VEHICLE ROLE

- (0) Non-collision
 (1) Striking Unit
 (2) Struck Unit
 (3) Both Striking and Struck
 (9) Unknown

MANNER OF LEAVING SCENE

- (1) Driven
 (2) Towed-due to damage
 (3) Towed - not for damage
 (4) Towed - details unknown
 (5) Abandoned
 (9) Unknown

NUMBER OF IMPACT EVENTS

- (8) 8 or more, (9) Unknown

ROLLOVER

- (0) No Rollover
 (1) First Event
 (2) Subsequent Event
 (3) Yes, Unknown Event
 (9) Unknown

OVERRIDE/UNDERRIDE

- (1) No over/underride
 (1) Override - 1st CDC
 (3) - Other CDC
 (4) Underride - 1st CDC
 (6) - Other CDC
 (9) Unknown

AIRBAG VEHICLE DAMAGE

- CODES: (1) Yes, DAMAGED
 (2) No Damage
 (9) Unknown

LEFT FRONT FENDER DAMAGE

RIGHT FRONT FENDER DAMAGE

CENTER TOP OF GRILLE DAMAGE

FRONT BUMPER E.A. STATUS: Left

- (1) Normal Right
 (2) Extended
 (3) Partial Compression
 (4) Complete Compression
 (5) Not Applicable
 (9) Unknown

FIRST AIRBAG VEHICLE IMPACT:

CONFIGURATION

- (0) Struck Object or Pedestrian
 (1) Rear-End
 (2) Head-On
 (3) Rear-to-Rear
 (4) Angle
 (5) Sideswipe - Same Direction
 (6) Sideswipe-Opposite Direct.
 (7) NonColl:eg Fell from Veh
 (8) NonImpact Deployment
 (9) Unknown

CDC 01 - FLEW - 2OBJECT CONTACTED: 1988 DODGE CARAVAN

PRIMARY/DEPLOYMENT IMPACT:

EVENT NUMBER

TOTAL DELTA-V 14.4 mphLONGITUDINAL DELTA-V 13.1 mph

CONFIGURATION

- (0) Struck Object or Pedestrian
 (1) Rear-End
 (2) Head-On
 (3) Rear-to-Rear
 (4) Angle
 (5) Sideswipe - Same Direction
 (6) Sideswipe-Opposite Direct.
 (7) NonColl:eg Fell from Veh
 (8) NonImpact Deployment
 (9) Unknown

CDC 01 - FLEW - 2OBJECT CONTACTED: 88 DODGE CARAVAN

NOTES:

SYSTEM DAMAGE

AIRBAG SUPPLEMENT AB-4

AIRBAG SYSTEM DAMAGE

CODES: (1) Yes, Damaged*
 (2) No, Intact
 (8) Not App. (Removed)
 (9) Unknown

AIRBAG MODULE NORMAL PARTING
H-CONFIGURATION

SENSORS: Left Front

Center Front

Right Front

Rear, Cowl

DIAGNOSTIC MODULE

WIRING

KNEE DIVERter

INDICATION OF DISCONNECTED
 OR LOOSE ELECTRICAL
 CONNECTORS

118222222

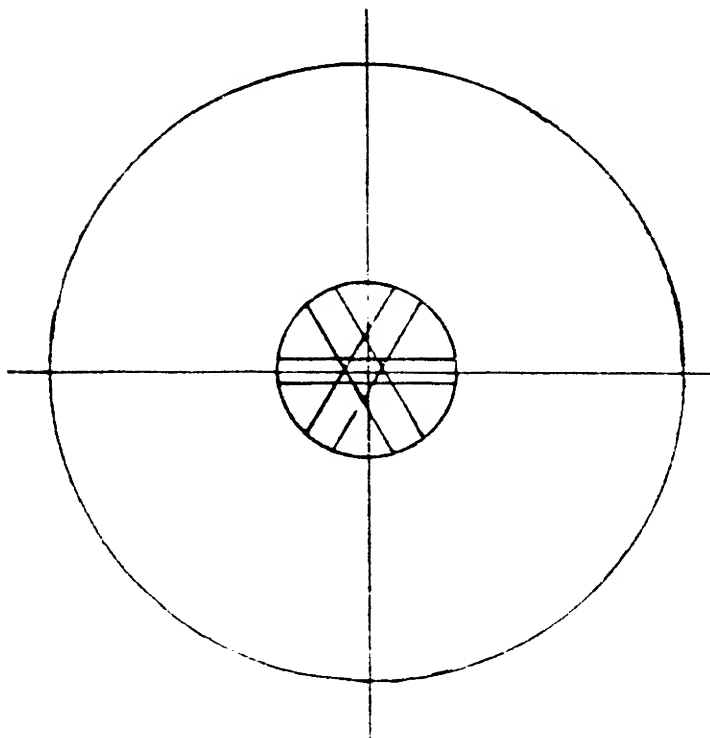
CONDITION OF DEPLOYED BAG

(1) Bag Intact
 (2) Split or Torn*
 (3) Cut by Object in Impact*
 (4) Cut after Accident*
 (5) Other (e.g., burned)*
 (8) N/A (not deployed)
 (9) Unknown

1

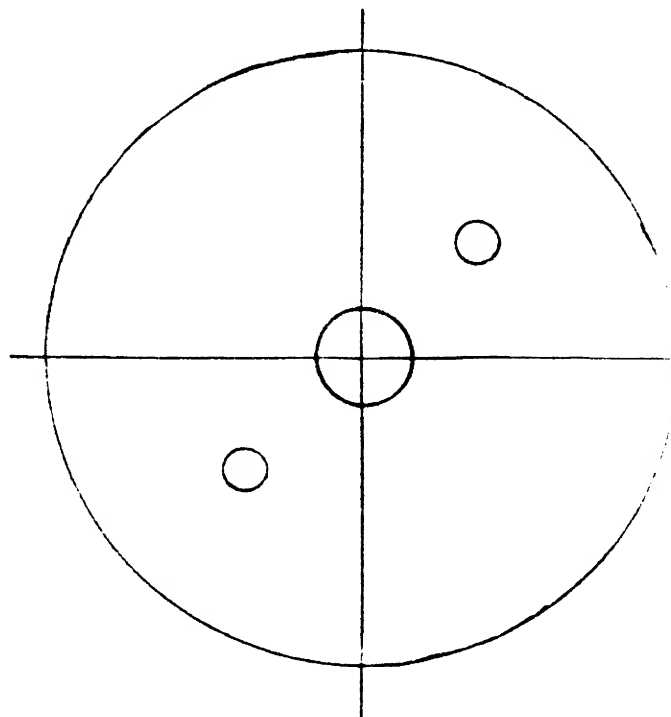
*DESCRIBE System and Bag Damage:

NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS BELOW:

NO EVIDENCE OF CONTACT

FRONT

TOP



BOTTOM

OCCUPANTS/DRIVER

AIRBAG SUPPLEMENT AB-5

OCCUPANTS of AIRBAG CAR

NUMBER OF OCCUPANTS IN VEHICLE
(8) 8 or more
NUMBER OF INJURED PERSONS
MAXIMUM AIS IN AIRBAG VEHICLE
(0) No Injury
(1-6) AIS Severity
(7) Injured, Unknown Severity
(9) Unknown

111

NOTES:

DRIVER AGE 31 SEX FEMALE

NUMBER OF DRIVER INJURIES

4

SOURCE OF BEST INJURY DATA

3

- (0) Not Injured
(1) Autopsy w/wo med. records
(2) Hospital Medical Records
(3) Emergency Room only
(4) Private physician, Clinic
(5) Lay Coroner Report
(6) EMS Personnel
(7) Interviewee
(8) Police
(9) Unknown

MAXIMUM AIS BY BODY REGION

REGION	MAX AIS	CONTACT
Head/Neck/Face	<u> </u>	<u> </u> <u> </u>
Chest	<u> </u>	<u> </u> <u> </u>
Abdomen	<u> </u>	<u> </u> <u> </u>
Leg/Hips	<u> </u>	<u> </u> <u> </u>
Other (Arms)	<u> 1 </u>	<u> 4 </u> <u> 1 </u>
DRIVER MAXIMUM	<u> 1 </u>	<u> 4 </u> <u> 1 </u>

EJECTION: Extent NONEPortal N/A

DRIVER-PASSENGER

AIRBAG SUPPLEMENT AB-6

DRIVER BELT USAGE: (1) Used (2) Not Used (9) Unknown 1

Evidence: LACK OF OCCUPANT CONTACTS, DRIVER INTERVIEW

DRIVER POSTURE: Any Comments Recorded (1) Yes, (2) No 1

Describe driver's posture and position on seat including specific comments on head, torso, buttocks, legs and feet. Also note hand and arm position. Did driver brace before crash? Describe:

NORMAL POSTURE, BOTH HANDS ON WHEEL AT 10 AND 2
O'CLOCK, (DEATH GRIP ON WHEEL)

DRIVER FOREIGN OBJECTS: Comments Recorded (1) Yes, (2) No 1

Was driver wearing contact lenses or eyeglasses? Or holding any foreign object at the time of the impact (packages on lap, pipe, food, bottle, cigarette, etc.)? Did any lenses, objects, or jewelry play any role?:

WEARING CONTACT LENSES, NOT DAMAGED, REMAINED IN EYES

RINGS, WATCH, BRACELET, NOT DAMAGED, REMAINED IN PLACE

DRIVER COMMENTS: Comments Recorded (1) Yes, (2) No 1

Was the driver aware that the vehicle was equipped with a supplemental restraint system? Did driver offer any comments on smoke, noise, etc.? Did the driver comment on the airbag as a restraint system? Describe:

SAW SMOKE & DUST, NO NOISE, NO RINGING IN EARS

DRIVER STATED BAG PREVENTED HER FROM SERIOUS INJURY

PASSENGER-AIRBAG CONTACT (1) Yes, (2) No, (9) Unknown 8

Describe: NO PASSENGER

APPENDIX D

NASS Vehicle Forms

(Air Bag Vehicle)



GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

VEHICLE IDENTIFICATION

4. Vehicle Model Year

Code the last two digits of the model year
(99) Unknown

5. Vehicle Make (specify):

DODGE
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown

6. Vehicle Model (specify):

CARAVAN 7 PASSENGER
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown

7. Body Type

Note: Applicable codes may be found on
the back of this page.

8. Vehicle Identification Number

2B4GK25K6MRLeft justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nine's

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition

(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

10. Police Reported Travel Speed

Code to the nearest mph (NOTE: 00 means
less than 0.5 mph)
(97) 96.5 mph and above
(99) Unknown

11. Police Reported Alcohol Presence

(0) No alcohol present
(1) Yes (alcohol present)
(7) Not reported
(8) No driver present
(9) UnknownNote: See variables 37 through 55
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver

Code actual value (decimal implied
before first digit—0.xx)
(95) Test refused
(96) None given
(97) AC test performed, results unknown
(98) No driver present
(99) Unknown

Source: _____

ACCIDENT RELATED

13. Speed Limit

(00) No statutory limit
Code posted or statutory speed limit
(99) Unknown

14. Attempted Avoidance Maneuver

(00) No impact
(01) No avoidance actions
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(97) No driver present
(98) Other action (specify):
(99) Unknown

15. Accident Type

Applicable codes may be found on the
back of page two of this field form
(00) No impact
Code the number of the diagram that
best describes the accident circumstance
(98) Other accident type (specify):
(99) Unknown

**** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ****

CODES FOR BODY TYPE

BEST AVAILABLE COPY

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): _____

- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 10,000$ lbs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravado, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 10,000$ lbs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 10,000$ lbs GVWR)
- (23) Van based motorhome ($\leq 10,000$ lbs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): _____

- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 10,000$ lbs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)
- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 10,000$ lbs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): _____
- (59) Unknown bus type

Medium/Heavy Trucks ($> 10,000$ lbs GVWR)

- (60) Step van ($> 10,000$ lbs GVWR)
- (61) Single unit straight truck ($10,000$ lbs $<$ GVWR $\leq 19,500$ lbs)
- (62) Single unit straight truck ($19,500$ lbs $<$ GVWR $\leq 26,000$ lbs)
- (63) Single unit straight truck ($> 26,000$ lbs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): _____
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

OCCUPANT RELATED

16. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
17. Number of Occupants This Vehicle 01
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
18. Number of Occupant Forms Submitted 01

VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 03300
~~3273~~ Code weight to nearest 100 pounds.
 (010) Less than 1050 pounds
 (135) 13,500 pounds or more
 (999) Unknown
 Source:
20. Vehicle Cargo Weight 0000
~~NA~~ Code weight to nearest 100 pounds.
 (00) Less than 50 pounds
 (97) 9,650 pounds or more
 (99) Unknown

RECONSTRUCTION DATA

21. Towed Trailing Unit 0
 (0) No towed unit
 (1) Yes—towed trailing unit
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 0
 (0) No
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
 (0) Not collision (for highest delta V) with tree or pole
 (1) Not damaged
 (2) Cracked/sheared
 (3) Tilted < 45 degrees
 (4) Tilted ≥ 45 degrees
 (5) Uprooted tree
 (6) Separated pole from base
 (7) Pole replaced
 (8) Other (specify):
 (9) Unknown

24. Rollover 0
 (0) No rollover (no overturning)
Rollover (primarily about the longitudinal axis)
 (1) Rollover, 1 quarter turn only
 (2) Rollover, 2 quarter turns
 (3) Rollover, 3 quarter turns
 (4) Rollover, 4 or more quarter turns (specify):

 (5) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (9) Rollover (overturn), details unknown

OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 0
26. Rear Override/Underride (this Vehicle) 0
 (0) No override/underride, or not an end-to-end impact
Override (see specific CDC)
 (1) 1st CDC
 (2) 2nd CDC
 (3) Other not automated CDC (specify):

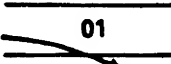
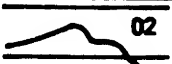
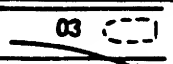



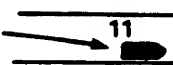


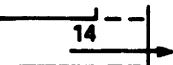


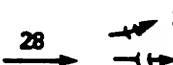


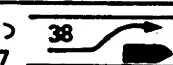
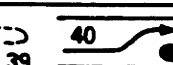
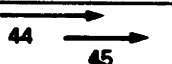
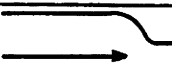
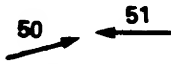



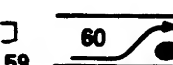

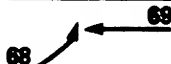


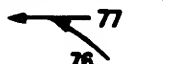



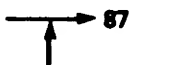

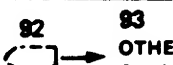
Underride (see specific CDC)
 (4) 1st CDC
 (5) 2nd CDC
 (6) Other not automated CDC (specify):

 (7) Medium/heavy truck or bus override
 (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
 (997) Noncollision
 (998) Impact with object
 (999) Unknown

27. Heading Angle For This Vehicle 060
28. Heading Angle For Other Vehicle 270

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II. Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 24 SLOWER 25, 26, 27	 28 DECEL. 29, 30, 31	(EACH • 32) SPECIFICS OTHER	(EACH • 33) SPECIFICS UNKNOWN
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) (EACH • 43) SPECIFICS OTHER SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 45	 46 45 47	(EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN	
III. Same Trafficway Opposite Direction	G. Head-On	 50 LATERAL MOVE	51 (EACH • 52) SPECIFICS OTHER	(EACH • 53) SPECIFICS UNKNOWN		
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 62) (EACH • 63) SPECIFICS OTHER SPECIFICS UNKNOWN
	I. Sideswipe Angle	 64 LATERAL MOVE	65 (EACH • 66) SPECIFICS OTHER	(EACH • 67) SPECIFICS UNKNOWN		
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 71 INITIAL SAME DIRECTIONS	 73 72	(EACH • 74) (EACH • 75) SPECIFICS OTHER SPECIFICS UNKNOWN	
	K. Turn Into Path	 77 76	 79 78	 81 80	 83 82	(EACH • 84) (EACH • 85) SPECIFICS OTHER SPECIFICS UNKNOWN
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 87	 88 89	(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN	
VI. Miscellaneous	M. Backing Etc.	 92 BACKING VEH.	93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

29. Basis for Total Delta V (highest) 1*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

Delta V Not Calculated

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

COMPUTER GENERATED DELTA V

30. Total Delta V

Secondary Highest

14.4 Nearest mph

(NOTE: 00 means less than
0.5 mph)
(97) 96.5 mph and above
(99) Unknown

31. Longitudinal Component of
Delta V+ 0 1 3- Nearest mph

(NOTE: __00 means greater than
-0.5 and less than +0.5 mph)
(± 97) ±96.5 mph and above
(__99) Unknown

Secondary Highest

32. Lateral Component of Delta V

+ 0 0 6-6.1 Nearest mph

(NOTE: __00 means greater than
-0.5 and less than +0.5 mph)
(± 97) ±96.5 mph and above
(__99) Unknown

33. Energy Absorption

0 4 7 . 6 0 047641.8 Nearest 100 foot-lbs

(NOTE: 0000 means less than 50 foot-lbs)
(9997) 999,650 foot-lbs or more
(9999) Unknown

34. Confidence In Reconstruction Program
Results (For Highest Delta V)

- (0) No reconstruction 1
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection

- (0) No inspection 1
- (1) Complete inspection
- (2) Partial inspection (specify):

36. Is this an AOPS Vehicle?

- (0) No 1
- (1) Yes

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [] YES [] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [] YES [] NO

37. Police Reported Other Drug Presence 0

- (0) No other drugs present
- (1) Yes (other drug present)
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Observation/Perception Test Type For Driver 0

- (0) No observation/perception test given
- (1) Drug recognition technician (DRT) determination using DEC process
- (2) Behavioral
- (3) Other physical observation/perception determination (specify): _____
- (4) DEC process available, unknown if determination made
- (5) DEC process not available, unknown if other observation/perception test given
- (7) Other observation/perception test (specify): _____
- (8) No driver present

39. Other Drug Specimen Test Type For Driver 0

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): _____
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

DRUG EVALUATION CLASSIFICATION
OTHER DRUGS TEST RESULTS FOR DRIVER

DEC	
Observation/ Perception Test Results	Specimen Test Results
Narcotic Drug 40. <u>0</u>	41. <u>0</u>
Depressant Drug 42. <u>0</u>	43. <u>0</u>
Stimulant Drug 44. <u>0</u>	45. <u>0</u>
Hallucinogen Drug 46. <u>0</u>	47. <u>0</u>
Cannabinoid Drug 48. <u>0</u>	49. <u>0</u>
Phencyclidine (PCP) 50. <u>0</u>	51. <u>0</u>
Inhalant Drug 52. <u>0</u>	53. <u>0</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash) 54. <u>0</u>	55. <u>0</u>

Codes For Observation/Perception Test Results

- (0) No DEC observation/perception test given
- (1) Passed DEC observation/perception test
- (2) Failed DEC observation/perception test
- (3) DEC observation/perception test given—
results unknown
- (8) No driver present
- (9) Unknown if DEC observation/perception
test given

Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or
not obtained
- (8) No driver present
- (9) Unknown if specimen test given

OTHER DATA

56. Driver's Zip Code

- (00000) Driver not present
 (00001) Driver not a resident of U.S. or territories
 Code actual 5-digit zip code
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present
 (1) White (non-Hispanic)
 (2) Black (non-Hispanic)
 (3) White (Hispanic)
 (4) Black (Hispanic)
 (5) American Indian, Eskimo or Aleut
 (6) Asian or Pacific Islander
 (8) Other (specify):
 (9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use
 (1) Taxi
 (2) Vehicle used as school bus
 (3) Vehicle used as other bus
 (4) Military
 (5) Police
 (6) Ambulance
 (7) Hearse
 (8) Fire truck or car
 (9) Unknown

ROLLOVER DATA

If GV07 (Body Type) \neq 1-49, leave GV59-GV63 blank.
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover
 (1) Trip-over
 (2) Flip-over
 (3) Turn-over
 (4) Climb-over
 (5) Fall-over
 (6) Bounce-over
 (7) Collision with another vehicle
 (8) Other rollover initiation type specify:
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (9) Unknown

61. Rollover Initiation Object Contacted

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify):

(8) Non-contact rollover forces (specify):

(9) Unknown

63. Direction of Initial Roll

- (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (5) End-over-end (i.e., primarily about the lateral axis)
 (9) Unknown roll direction

PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight
 (02) Slowing or stopping in traffic lane
 (03) Starting in traffic lane
 (04) Stopped in traffic lane
 (05) Passing or overtaking another vehicle
 (06) Disabled or parked in travel lane
 (07) Leaving a parking position
 (08) Entering a parking position
 (09) Turning right
 (10) Turning left
 (11) Making a U-turn
 (12) Backing up (other than for parking position)
 (13) Negotiating a curve
 (14) Changing lanes
 (15) Merging
 (16) Successful avoidance maneuver to a previous critical event
 (97) Other (specify):
 (98) No driver present
 (99) Unknown

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover
(01-30) — Vehicle Number

Noncollision

(31) Turn-over — fall-over
(33) Jackknife

Collision With Fixed Object

(41) Tree (\leq 4 inches in diameter)
(42) Tree ($>$ 4 inches in diameter)
(43) Shrubbery or bush
(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

(50) Pole or post (\leq 4 inches in diameter)
(51) Pole or post ($>$ 4 inches but \leq 12 inches in diameter)
(52) Pole or post ($>$ 12 inches in diameter)
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail)
(specify): _____

(57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify): _____

(69) Unknown fixed object

Collision with Nonfixed Object

(71) Motor vehicle not in-transport
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(88) Other nonfixed object (specify): _____

(89) Unknown nonfixed object

(98) Other event (specify): _____

(99) Unknown event or object

PRECRASH DATA (Continued)**65. Critical Precrash Event**61*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

Other Motor Vehicle In Lane

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): _____
- (99) Unknown

For Corrective Actions Attempted see variable GV14
(Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver2

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): _____
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action)0

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35=0), ***
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM**

1. Primary Sampling Unit Number _____ 2. Case Number - Stratum <u>92-10</u>	3. Vehicle Number <u>01</u>
--	-----------------------------

VEHICLE IDENTIFICATION

VIN 2 B 4 G K 2 5 K 6 M R _____ Model Year 9 1
Vehicle Make (specify): DODGE Vehicle Model (specify): CARAVAN

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	BUMPER FACIA 11.25 - 30.5" (C)	FULL WIDTH OF BUMPER
	OF CENTER	RE-BAR

CRUSH PROFILE

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

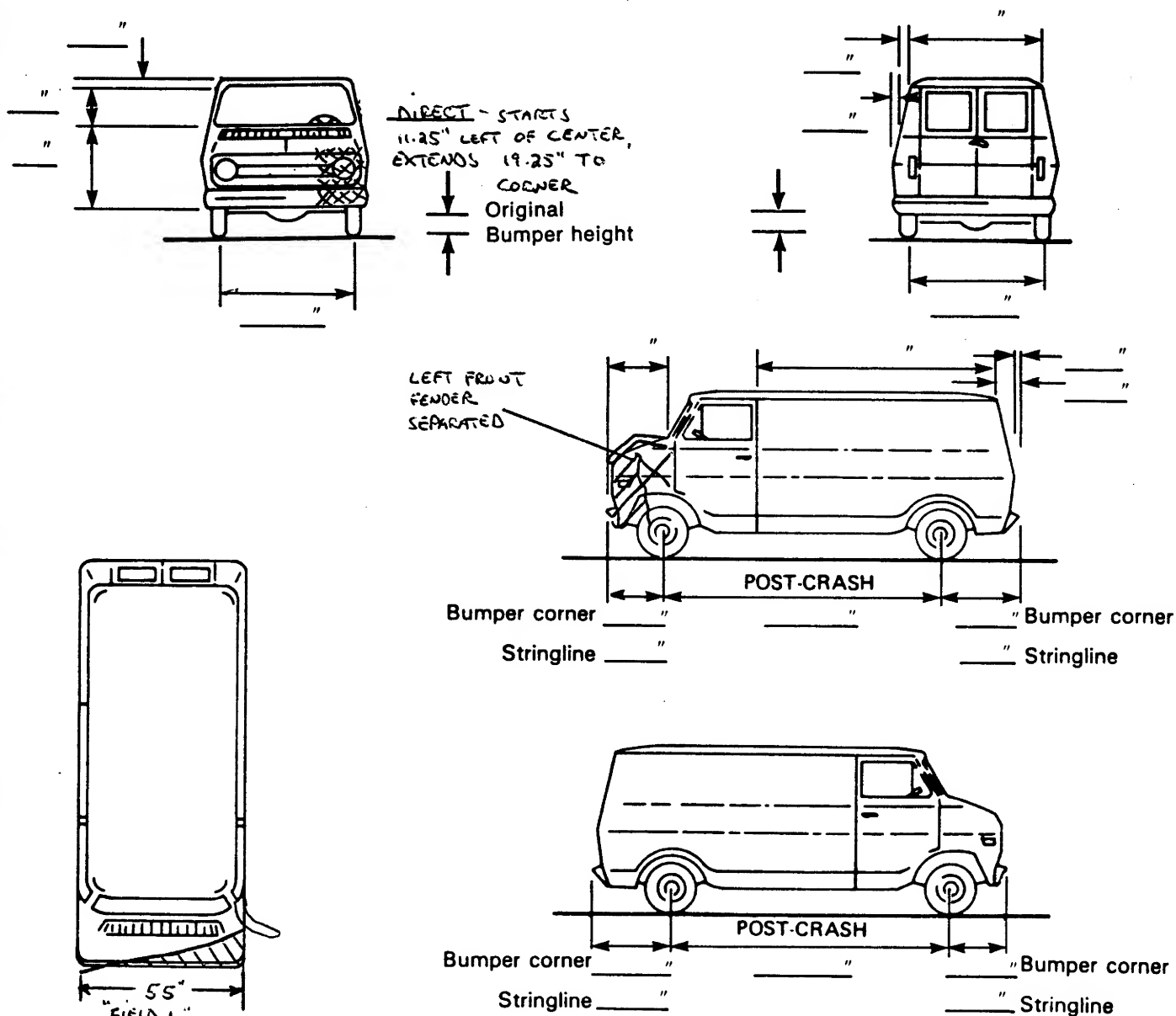
Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

VEHICLE DAMAGE SKETCH

TIRE – WHEEL DAMAGE a. Rotation physically restricted RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		ORIGINAL SPECIFICATIONS Wheelbase <u>112.3"</u> Overall Length <u>175.9"</u> Maximum Width <u>72.0"</u> Curb Weight <u>3273</u> Average Track _____ Front Overhang _____ Rear Overhang _____ Engine Size: cyl./ displ. <u>4 cyl/2.5L</u> Undeformed End Width <u>61.0"</u>		WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only) RF \pm _____° LF \pm _____° RR \pm _____° LR \pm _____° Within ± 5 degrees
TYPE OF TRANSMISSION <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic		DRIVE WHEELS <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD		
		Approximate Cargo Weight <u>N/A</u>		



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewall, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CODES FOR OBJECT CONTACTED

(57) Fence

(58) Wall

- (59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb

(64) Bridge

(68) Other fixed object (specify):

(69) Unknown fixed object

Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
(72) Pedestrian
(73) Cyclist or cycle
(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) **Animal**

- (77) Train

(78) Trailer, disconnected in transport

(88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object

[illegible]

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>02</u>	6. <u>D1</u>	7. <u>F</u>	8. <u>L</u>	9. <u>E</u>	10. <u>W</u>	11. <u>02</u>

Second Highest Delta "V"

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

CRUSH PROFILE

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN INCHES.)

HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	22. <u>±D</u>
<u>055"</u>	<u>16</u>	<u>13</u>	<u>08</u>	<u>04</u>	<u>01</u>	<u>00</u>	<u>+0021</u>

Second Highest Delta "V"

23. <u>L</u>	24. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	25. <u>±D</u>
_____	_____	_____	_____	_____	_____	_____	<u>+ - _____</u>

26. Are CDCs Documented but Not Coded on The Automated File? 0
(0) No
(1) Yes

27. Researcher's Assessment of Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

28. Original Wheelbase 112.3
112.3 Code to the nearest tenth of an inch
(9999) Unknown

29. Is This A Multi-Stage Manufactured Vehicle
And/Or A Certified Altered Vehicle? 0

- (0) No post manufacturer modifications
(1) Yes - post manufacturer modifications
(specify): _____

(Include photograph of CERTIFICATION
PLACARD in case report)

(9) Unknown if vehicle is modified

30. Fire Occurrence 0

(0) No fire

Yes, fire occurred

- (1) Minor
(2) Major
(9) Unknown

31. Origin of Fire 0

- (0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention
system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify): _____

(9) Unknown

32. Type of Fuel Tank 1

- (0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS ***
(I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

9 2 - 1 0

3. Vehicle Number

0 1

INTEGRITY

4. Passenger Compartment Integrity

0 0

(00) No integrity loss

Yes, Integrity Was Lost Through

- (01) Windshield
- (02) Door (side)
- (03) Door/hatch (back door)
- (04) Roof
- (05) Roof glass
- (06) Side window
- (07) Rear window (backlight)
- (08) Roof and roof glass
- (09) Windshield and door (side)
- (10) Windshield and roof
- (11) Side and rear window (side window and backlight)
- (12) Windshield and side window
- (13) Door and side window
- (98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF (6. RF (7. LR 0 8. RR (9. TG/H (

- (0) No door/gate/hatch
- (1) Door/gate/hatch remained closed and operational
- (2) Door/gate/hatch came open during collision
- (3) Door/gate/hatch jammed shut
- (8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 \neq 2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)
- (2) Latch/striker failure due to damage
- (3) Hinge failure due to damage
- (4) Door structure failure due to damage
- (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
- (6) Latch/striker and hinge failure due to damage
- (8) Other failure (specify):

(9) Unknown

GLAZING

Glazing Damage from Impact Forces

15. WS 0 16. LF 0 17. RF 0 18. LR 0 19. RR 0

20. BL 0 21. Roof 8 22. Other 8

- (0) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (8) No glazing
- (9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 0 24. LF 0 25. RF 0 26. LR 0 27. RR 0

28. BL 0 29. Roof 0 30. Other 0

- (0) No occupant contact to glazing or no glazing
- (1) Glazing contacted by occupant but no glazing damage
- (2) Glazing in place and cracked by occupant contact
- (3) Glazing in place and holed by occupant contact
- (4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (5) Glazing out-of-place by occupant contact and holed by occupant contact
- (6) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant

If No Glazing Damage *And* No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS 0 32. LF 0 33. RF 0 34. LR 0 35. RR 0

36. BL 0 37. Roof 0 38. Other 0

- (0) No glazing contact and no damage, or no glazing
- (1) AS-1 - Laminated
- (2) AS-2 - Tempered
- (3) AS-3 - Tempered-tinted
- (4) AS-14 - Glass/Plastic
- (8) Other (specify):

(9) Unknown

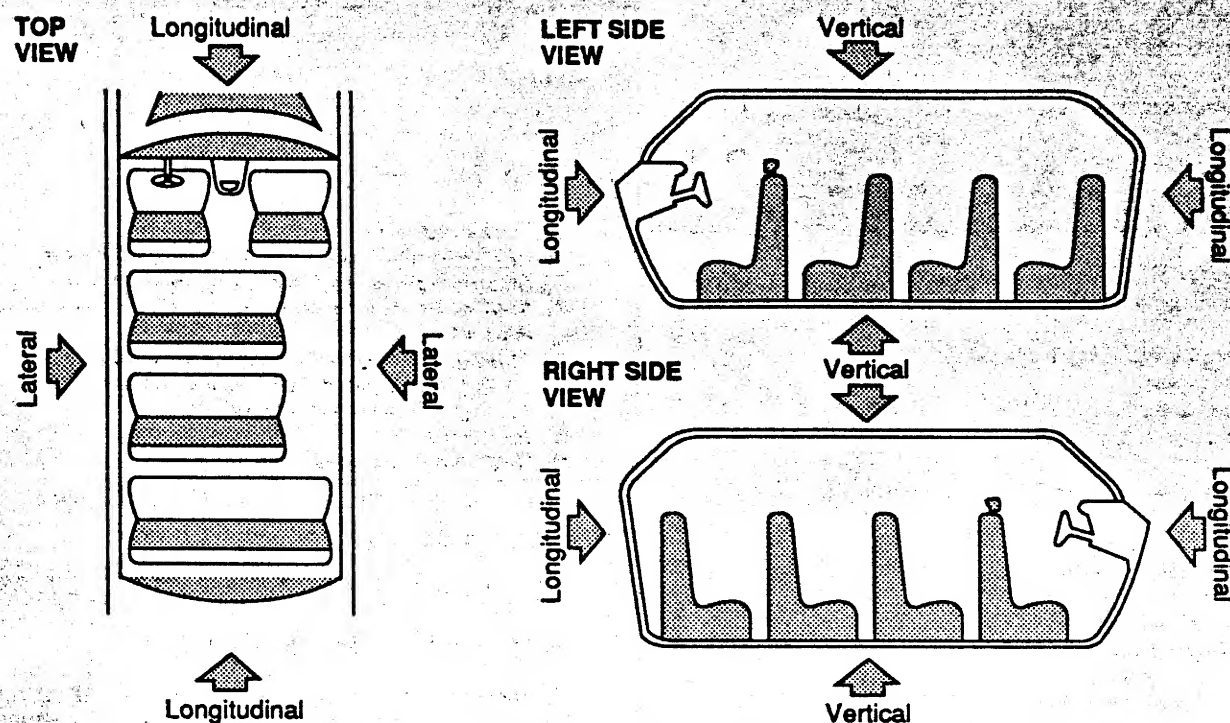
Window Precrash Glazing Status

39. WS 0 40. LF 0 41. RF 0 42. LR 0 43. RR 0

44. BL 0 45. Roof 0 46. Other 0

- (0) No glazing contact and no damage, or no glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (9) Unknown

INTRUSION WORKSHEET



Note: Sketch intruded areas

[illegible]

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. _____	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

LOCATION OF INTRUSION

Front Seat
 (11) Left
 (12) Middle
 (13) Right

Second Seat
 (21) Left
 (22) Middle
 (23) Right

Third Seat
 (31) Left
 (32) Middle
 (33) Right

Fourth Seat
 (41) Left
 (42) Middle
 (43) Right

(97) Catastrophic
 (98) Other enclosed area (specify) _____

(99) Unknown

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): _____

- (27) Side panel - forward of the A-pillar
- (28) Side panel - rear of the A-pillar

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

MAGNITUDE OF INTRUSION

- (1) ≥ 1 inch but < 3 inches
- (2) ≥ 3 inches but < 6 inches
- (3) ≥ 6 inches but < 12 inches
- (4) ≥ 12 inches but < 18 inches
- (5) ≥ 18 inches but < 24 inches
- (6) ≥ 24 inches
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING RIM/SPOKE DEFORMATION

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

STEERING COLUMN

87. Steering Column Type

- (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify): _____
 (9) Unknown

1

88. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-91 CDS.

X X

89. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-91 CDS.

X X X

90. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-91 CDS.

X X X

91. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-91 CDS.

X X X

92. Steering Rim/Spoke Deformation

Code actual measured

deformation to the nearest inch.

- (0) No steering rim deformation
 (1-5) Actual measured value
 (6) 6 inches or more
 (8) Observed deformation cannot be measured
 (9) Unknown

0

93. Location of Steering Rim/Spoke Deformation

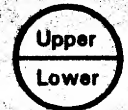
(00) No steering rim deformation

00*Quarter Sections*

- (01) Section A
 (02) Section B
 (03) Section C
 (04) Section D

*Half Sections*

- (05) Upper half of rim/spoke
 (06) Lower half of rim/spoke
 (07) Left half of rim/spoke
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse
 (10) Undetermined location
 (99) Unknown

INSTRUMENT PANEL

94. Odometer Reading

009,000

8786 miles—Code mileage to the nearest 1,000 miles

- (000) No odometer
 (001) Less than 1,500 miles
 (300) 299,500 miles or more
 (999) Unknown

Source: _____

95. Instrument Panel Damage from Occupant Contact?

- (0) No
 (1) Yes
 (9) Unknown

0

96. Knee Bolsters Deformed from Occupant Contact?

- (0) No
 (1) Yes
 (8) Not present
 (9) Unknown

0

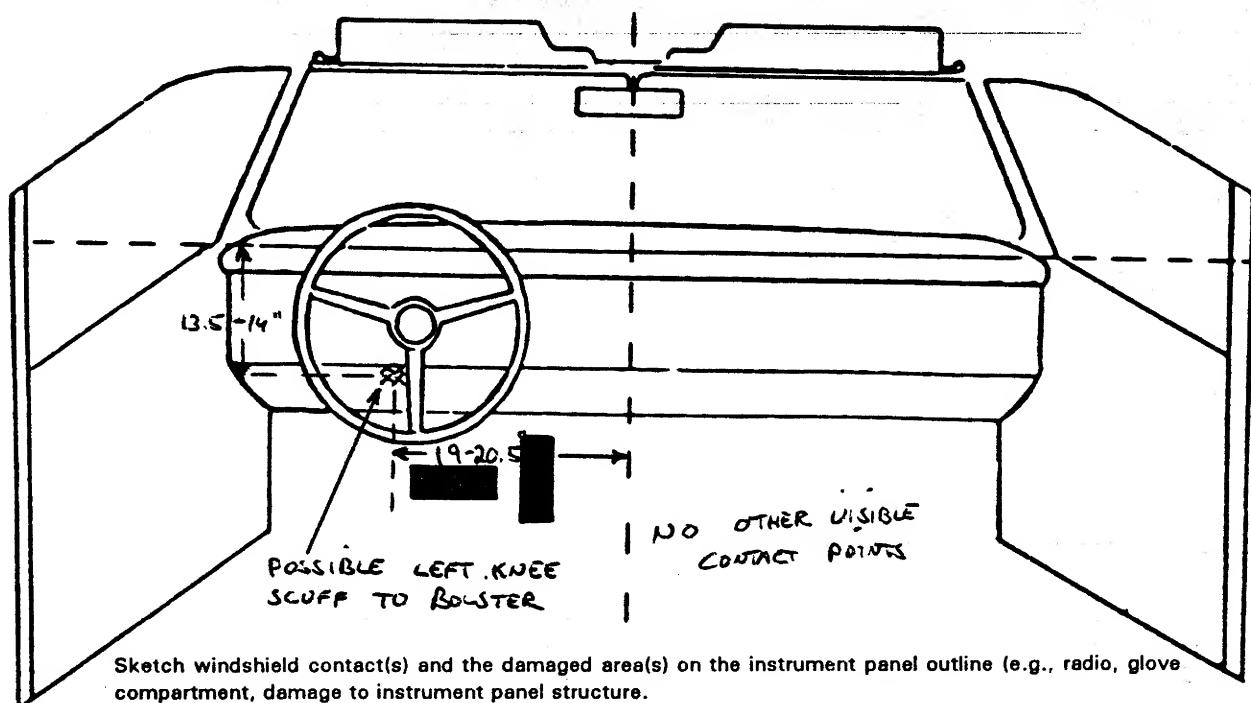
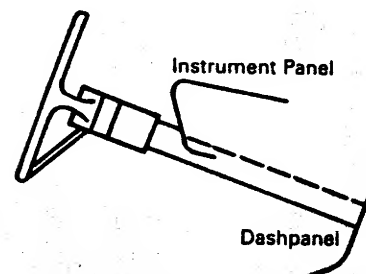
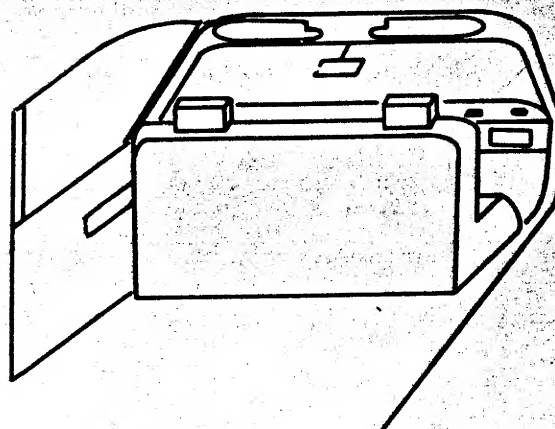
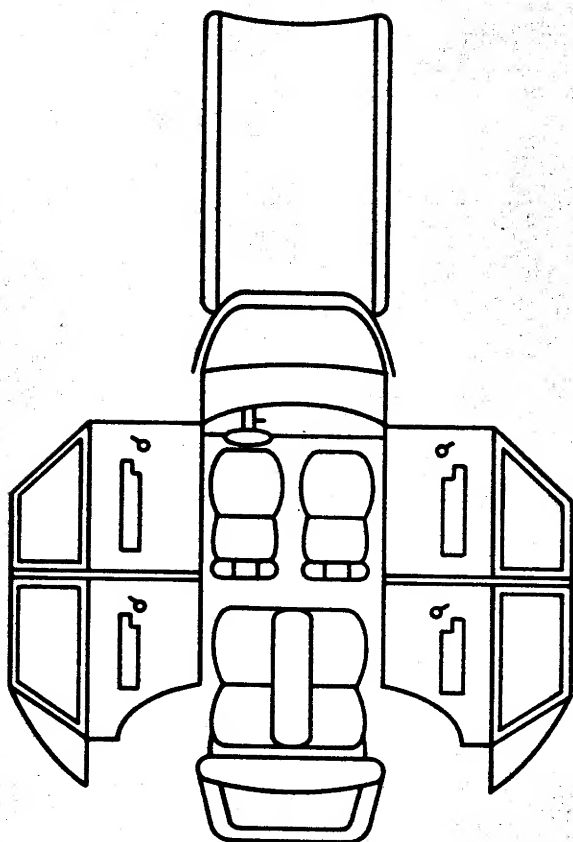
97. Did Glove Compartment Door Open During Collision(s)?

- (0) No
 (1) Yes
 (8) Not present
 (9) Unknown

0

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	13	DRIVER	① KNEE	SCUFF	2
B	41	DRIVER	TORSO	NO EVIDENCE OF LOADING	1
C	45	DRIVER	FACE	NO EVIDENCE OF LOADING	1
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify):

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify):
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (27) Other left side object (specify):

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (37) Other right side object (specify):
- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify):
- (44) Head restraint system
- (45) Air bag
- (46) Other occupants (specify):
- (47) Interior loose objects

- (48) Child safety seat (specify):

- (49) Other interior object (specify):

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify):

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Left	Right
F I R S T	Availability/Function	1	0
	Deployment	1	0
	Failure	1	0

Air Bag System Availability/Function

- (0) Not equipped/not available
(1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled
(9) Unknown

Air Bag System Deployment

- (0) Not equipped/not available
(1) Air bag deployed during accident (as a result of impact)
(2) Air bag deployed inadvertently just prior to accident
(3) Air bag deployed, accident sequence undetermined
(4) Nondeployed
(5) Unknown if deployed
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(9) Unknown

Did Air Bag System Fail?

- (0) Not equipped/not available
(1) No
(2) Yes (specify):

(9) Unknown

AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	0	0
	Use	0	0
	Type	0	0
	Proper Use	0	0
	Failure Modes	0	0

Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
(9) Unknown

Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)
(3) Automatic belt use unknown
(9) Unknown

Automatic (Passive) Belt System Type

- (0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):

(9) Unknown

Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify):

(6) Broken retractor
(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	-	4
	Use	04	-	-
	Failure Modes	1	-	-
SECOND	Availability	-	4	4
	Use	-	-	-
	Failure Modes	-	-	-
THIRD	Availability	4	3	4
	Use	-	-	-
	Failure Modes	-	-	-
OTHER	Availability	X		
	Use			
	Failure Modes			

Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____
- (02) Shoulder belt _____
- (03) Lap belt _____
- (04) Lap and shoulder belt _____
- (05) Belt used - type unknown _____

(08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used _____

Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor _____
- (7) Combination of above (specify): _____
- (8) Other manual belt failure (specify): _____
- (9) Unknown _____

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

- 5. Child Safety Seat Tether Usage
- Note: Options Below Are Used for Variables 3-5.
- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

- 6. Child Safety Seat Make/Model
- (Specify make/model and occupant number)

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	1	-	1
	Seat Type	10	-	10
	Seat Performance	1	-	1
	Seat Orientation	1	-	1
SECOND	Head Restraint Type/Damage	-	0	0
	Seat Type	-	03	03
	Seat Performance	-	1	1
	Seat Orientation	-	1	1
THIRD	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: _____

(9) Unknown

Seat Type (this Occupant Position)

- (00) No seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____

- (10) Box mounted seat (i.e., van type)
- (99) Unknown

Seat Performance (this Occupant Position)

- (0) No seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____

(7) Combination of above (specify): _____

(8) Other (specify): _____

(9) Unknown

Seat Orientation (this Occupant Position)

- (0) No seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____

(9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No ☒ Yes ☐

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
(1) Partial ejection
(3) Ejection, Unknown degree
(9) Unknown

Ejection Area

- (1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown**Ejection Medium**

- (1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify):

(5) Integral structure

- (8) Other medium (specify):

(9) Unknown**Medium Status (Immediately Prior to Impact)**

- (1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT No ☒ Yes ☐

Describe entrapment mechanism: _____

Component(s): _____

(Note in vehicle interior diagram)

APPENDIX E

NASS Occupant Forms
(Air Bag Vehicle)



OCCUPANT ASSESSMENT FORM

<p>1. Primary Sampling Unit Number _____</p> <p>2. Case Number - Stratum <u>92-10</u></p> <p>3. Vehicle Number <u>01</u></p> <p>4. Occupant Number <u>01</u></p>	<p>11. Occupant Posture <u>0</u> (0) Normal posture (1) Abnormal posture (specify): _____ (9) Unknown</p>
OCCUPANT'S CHARACTERISTICS	
<p>5. Occupant's Age <u>31</u> Code actual age at time of accident. (00) Less than one year old (specify by month): _____ (97) 97 years and older (99) Unknown</p> <p>6. Occupant's Sex <u>2</u> (1) Male (2) Female (9) Unknown</p> <p>7. Occupant's Height <u>68"</u> Code actual height to the nearest inch. (99) Unknown</p> <p>8. Occupant's Weight <u>125 LBS</u> <u>125</u> Code actual weight to the nearest pounds. (999) Unknown</p> <p>9. Occupant's Role <u>1</u> (1) Driver (2) Passenger (9) Unknown</p> <p>10. Occupant's Seat Position <u>11</u> <i>Front Seat</i> (11) Left side (12) Middle (13) Right side (14) Other (specify): _____ (15) On or in the lap of another occupant</p> <p><i>Second Seat</i> (21) Left side (22) Middle (23) Right side (24) Other (specify): _____ (25) On or in the lap of another occupant</p> <p><i>Third Seat</i> (31) Left side (32) Middle (33) Right side (34) Other (specify): _____ (35) On or in the lap of another occupant</p> <p><i>Fourth Seat</i> (41) Left side (42) Middle (43) Right side (44) Other (specify): _____ (45) On or in the lap of another occupant</p> <p>(97) In or on unenclosed area (98) Other seat (specify): _____ (99) Unknown</p>	<p>EJECTION/ENTRAPMENT</p> <p>12. Ejection <u>0</u> (0) No ejection (1) Complete ejection (2) Partial ejection (3) Ejection, unknown degree (9) Unknown</p> <p>13. Ejection Area <u>0</u> (0) No ejection (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear (7) Roof (8) Other area (e.g., back of pickup, etc.) (specify): _____ (9) Unknown</p> <p>14. Ejection Medium <u>0</u> (0) No ejection (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify): _____ (5) Integral structure (8) Other medium (specify): _____ (9) Unknown</p> <p>15. Medium Status (Immediately Prior To Impact) <u>0</u> (0) No ejection (1) Open (2) Closed (3) Integral structure (9) Unknown</p> <p>16. Entrapment <u>0</u> (NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.) (0) Not entrapped (1) Entrapped (9) Unknown</p>

RESTRAINT SYSTEM AND SEAT EVALUATION**17. Manual (Active) Belt System Availability** 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

18. Manual (Active) Belt System Use 04

(00) None used, not available, or belt removed/destroyed

(01) Inoperative (specify): _____

(02) Shoulder belt _____

(03) Lap belt _____

(04) Lap and shoulder belt _____

(05) Belt used—type unknown _____

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat _____

(13) Lap belt used with child safety seat _____

(14) Lap and shoulder belt used with child safety seat _____

(15) Belt used with child safety seat—type unknown _____

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used _____

19. Proper Use of Manual (Active) Belts 1

(0) None used or not available

(1) Belt used properly

(2) Belt used properly with child safety seat

Belt Used Improperly

(3) Shoulder belt worn under arm

(4) Shoulder belt worn behind back or seat

(5) Belt worn around more than one person

(6) Lap belt worn on abdomen

(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

20. Manual (Active) Belt Failure Modes During Accident 1

(0) No manual belt used

(1) No manual belt failure(s)

(2) Torn webbing (stretched webbing not included)

(3) Broken buckle or latchplate

(4) Upper anchorage separated

(5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

21. Air Bag System Availability/Function 1

(0) Not equipped/not available

(1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled _____

(9) Unknown _____

22. Air Bag System Deployment 1

(0) Not equipped/not available

(1) Air bag deployed during accident (as a result of impact)

(2) Air bag deployed inadvertently just prior to accident

(3) Air bag deployed, accident sequence undetermined

(4) Nondeployed

(5) Unknown if deployed

(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)

(9) Unknown _____

23. Did Air Bag System Fail? 1

(0) Not equipped/not available

(1) No

(2) Yes (specify): _____

(9) Unknown _____

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 7

(0) None used

(1) Police did not indicate restraint use

(2) Shoulder belt

(3) Lap belt

(4) Lap and shoulder belt

(5) Belt used, type not specified

(6) Child safety seat

(7) Other or automatic restraint (specify): _____

(8) Restrained, type unknown 4 ADS AIR BAG

(9) Police indicated "unknown" _____

25. Head Restraint Type/Damage by Occupant at This Occupant Position 1

(0) No head restraints

(1) Integral—no damage

(2) Integral—damaged during accident

(3) Adjustable—no damage

(4) Adjustable—damaged during accident

(5) Add-on—no damage

(6) Add-on—damaged during accident

(8) Other (specify): _____

(9) Unknown _____

26. Seat Type (this Occupant Position) 1 0
- (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Other seat type (specify): _____
 (10) Box mounted seat (i.e., van type)
 (99) Unknown
27. Seat Performance (this Occupant Position) 1
- (0) Occupant not seated or no seat
 (1) No seat performance failure(s)
 (2) Seat adjusters failed
 (3) Seat back folding locks or "seat back" failed
 (4) Seat track/anchors failed
 (5) Deformed by impact of occupant
 (6) Deformed by passenger compartment intrusion (specify): _____

 (7) Combination of above (specify): _____
 (8) Other (specify): _____
 (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 0 0 0
- (000) No child safety seat
 Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
 (950) Built-in child safety seat
 (997) Other make/model (specify): _____
 (998) Unknown make/model
 (999) Unknown if child safety seat used
29. Type of Child Safety Seat 0
- (0) No child safety seat
 (1) Infant seat
 (2) Toddler seat
 (3) Convertible seat
 (4) Booster seat
 (7) Other type child safety seat (specify): _____
 (8) Unknown child safety seat type
 (9) Unknown if child safety seat used

30. Child Safety Seat Orientation 0 0
- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight*
 (01) Rear facing
 (02) Forward facing
 (08) Other orientation (specify): _____
 (09) Unknown orientation
- Designed For Forward Facing for This Age/Weight*
 (11) Rear facing
 (12) Forward facing
 (18) Other orientation (specify): _____
 (19) Unknown orientation
- Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*
 (21) Rear facing
 (22) Forward facing
 (28) Other orientation (specify): _____
 (29) Unknown orientation
- (99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0 0
32. Child Safety Seat Shield Usage 0 0
33. Child Safety Seat Tether Usage 0 0
- Note: Options below applicable to Variables OA31-OA33.
 (00) No child safety seat

- Not Designed With Harness/Shield/Tether*
 (01) After market harness/shield/tether added, not used
 (02) After market harness/shield/tether used
 (03) Child safety seat used, but no after market harness/shield/tether added
 (09) Unknown if harness/shield/tether added or used
- Designed With Harness/Shield/Tether*
 (11) Harness/shield/tether not used
 (12) Harness/shield/tether used
 (19) Unknown if harness/shield/tether used
- Unknown If Designed With Harness/Shield/Tether*
 (21) Harness/shield/tether not used
 (22) Harness/shield/tether used
 (29) Unknown if harness/shield/tether used
- (99) Unknown if child safety seat used

INJURY CONSEQUENCES34. Injury Severity (Police Rating) 2

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):

(9) Unknown36. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown37. Hospital Stay 00

- (00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 05

Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

39. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
- (97) Other result (specify):

(99) Unknown43. Number of Recorded Injuries for This Occupant 04

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM**44. Automatic (Passive) Belt System Availability/Function** 0

- (0) Not equipped/not available
 (1) 2 point automatic belts
 (2) 3 point automatic belts
 (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
 (9) Unknown

45. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Automatic belt in use
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
 (3) Automatic belt use unknown
 (9) Unknown

46. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
 (1) Non-motorized system
 (2) Motorized system
 (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
 (1) Automatic belt used properly
 (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
 (4) Automatic shoulder belt worn behind back
 (5) Automatic belt worn around more than one person
 (6) Lap portion of automatic belt worn on abdomen
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):
 (8) Other improper use of automatic belt system (specify):
 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
 (1) No automatic belt failure(s)
 (2) Torn webbing (stretched webbing not included)
 (3) Broken buckle or latchplate
 (4) Upper anchorage separated
 (5) Other anchorage separated (specify):
 (6) Broken retractor
 (7) Combination of above (specify):
 (8) Other automatic belt failure (specify):
 (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):
 (9) Unknown

TRAUMA DATA**50. Glasgow Coma Scale (GCS) Score (at Medical Facility)** 15

- (00) Not injured
 (01) Injured - not treated at medical facility
 (02) No GCS Score at medical facility
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
 (97) Injured, details unknown
 (99) Unknown if injured

51. Was the Occupant Given Blood? 1

- (1) No - blood not given
 (2) Yes - blood given (specify units):
 (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO₃ 01

- (00) Not injured
 (01) Injured, ABGs not measured or reported
 (02-50) Code the actual value of the HCO₃
 (96) ABGs reported, HCO₃ unknown
 (97) Injured, details unknown
 (99) Unknown if injured

UPDATE CANDIDATE? NO [✓] YES []

OCCUPANT INJURY FORM INCLUDED WITH INITIAL SUBMISSION? NO [] YES [✓]

*** STOP HERE ***
 IF THERE ARE NO RECORDED INJURIES
 (I.E., OA43 = 00,97,99)



OCCUPANT INJURY FORM

1. ~~Primary Sampling Unit Number~~ _____

3. Vehicle Number 01

2. Case Number - ~~Stratum~~ 92-10

4. Occupant Number 01

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	O.I.C.-A.I.S				Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.	
		Body Region	Aspect	Lesion	System Organ					A.I.S. Severity
1st	5. <u>3</u>	6. <u>R</u>	7. <u>R</u>	8. <u>B</u>	9. <u>I</u>	10. <u>L</u>	11. <u>45</u>	12. <u>1</u>	13. <u>1</u>	14. <u>00</u>
2nd	15. <u>3</u>	16. <u>R</u>	17. <u>L</u>	18. <u>C</u>	19. <u>I</u>	20. <u>L</u>	21. <u>45</u>	22. <u>1</u>	23. <u>1</u>	24. <u>00</u>
3rd	25. <u>3</u>	26. <u>W</u>	27. <u>L</u>	28. <u>C</u>	29. <u>I</u>	30. <u>L</u>	31. <u>45</u>	32. <u>2</u>	33. <u>1</u>	34. <u>00</u>
4th	35. <u>3</u>	36. <u>B</u>	37. <u>I</u>	38. <u>I</u>	39. <u>M</u>	40. <u>L</u>	41. <u>92</u>	42. <u>1</u>	43. <u>2</u>	44. <u>00</u>
5th	45. <u> </u>	46. <u> </u>	47. <u> </u>	48. <u> </u>	49. <u> </u>	50. <u> </u>	51. <u> </u>	52. <u> </u>	53. <u> </u>	54. <u> </u>
6th	55. <u> </u>	56. <u> </u>	57. <u> </u>	58. <u> </u>	59. <u> </u>	60. <u> </u>	61. <u> </u>	62. <u> </u>	63. <u> </u>	64. <u> </u>
7th	65. <u> </u>	66. <u> </u>	67. <u> </u>	68. <u> </u>	69. <u> </u>	70. <u> </u>	71. <u> </u>	72. <u> </u>	73. <u> </u>	74. <u> </u>
8th	75. <u> </u>	76. <u> </u>	77. <u> </u>	78. <u> </u>	79. <u> </u>	80. <u> </u>	81. <u> </u>	82. <u> </u>	83. <u> </u>	84. <u> </u>
9th	85. <u> </u>	86. <u> </u>	87. <u> </u>	88. <u> </u>	89. <u> </u>	90. <u> </u>	91. <u> </u>	92. <u> </u>	93. <u> </u>	94. <u> </u>
10th	95. <u> </u>	96. <u> </u>	97. <u> </u>	98. <u> </u>	99. <u> </u>	100. <u> </u>	101. <u> </u>	102. <u> </u>	103. <u> </u>	104. <u> </u>

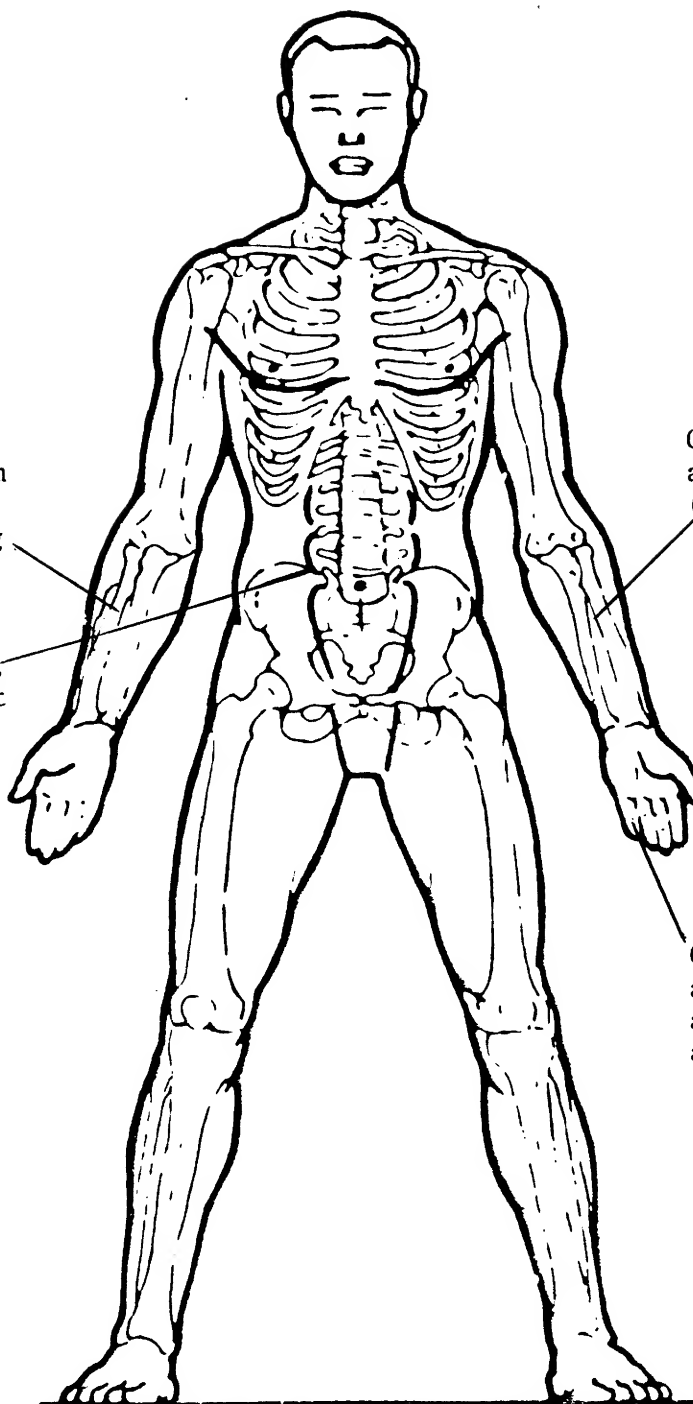
AGE 31
SEX Female
WT. 125 lbs.
HT. 68"

Thermal burns of the
right anterior forearm
(3 x 1.5") AIS-1, hot
gas within the air bag

Lumbar strain (AIS-1),
impact force/restraint
loading

Contusion of the anterior
aspect of the left forearm
(AIS-1), air bag

Contusions of the dorsal
aspect of the left ring
and 5th fingers (AIS-1),
air bag module flap
(Probable)



SOURCE OF INJURY DATA

OFFICIAL

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

INJURY SOURCE

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): _____
- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify): _____
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

EXTERIOR OF OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): _____
- (68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): _____
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): _____

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): _____
- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): _____
- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): _____
- (93) Air bag exhaust gases
- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION

O.I.C. Body Region

- (M) Abdomen
- (Q) Ankle-foot
- (A) Arm (upper)
- (B) Back-thoracolumbar spine
- (C) Chest
- (E) Elbow
- (F) Face
- (R) Forearm
- (H) Head-skull
- (U) Injured, unknown region
- (K) Knee
- (L) Leg (lower)
- (Y) Lower limb(s) (whole or unknown part)
- (N) Neck-cervical spine
- (P) Pelvic-hip
- (S) Shoulder
- (T) Thigh
- (X) Upper limb(s) (whole or unknown part)
- (O) Whole body
- (W) Wrist-hand

Aspect of Injury

- (A) Anterior-front
- (B) Bilateral (rib fracture only)
- (C) Central
- (I) Inferior-lower
- (U) Injured, unknown aspect
- (L) Left
- (P) Posterior-back
- (R) Right
- (S) Superior-upper
- (W) Whole region

Lesion

- (A) Abrasion
- (M) Amputation
- (V) Avulsion
- (B) Burn
- (K) Concussion
- (C) Contusion
- (N) Crush
- (G) Detachment, separation
- (D) Dislocation

(F) Fracture

- (Z) Fracture and dislocation
- (U) Injured, unknown lesion
- (L) Laceration
- (O) Other
- (P) Perforation, puncture
- (R) Rupture
- (S) Sprain
- (T) Strain
- (E) Total severance, transection

System/Organ

- (W) All systems in region
- (A) Arteries-veins
- (B) Brain
- (D) Digestive
- (E) Ears
- (O) Eye
- (H) Heart
- (U) Injured, unknown system
- (I) Integumentary
- (J) Joints
- (K) Kidneys

(L) Liver

- (M) Muscles
- (N) Nervous system
- (P) Pulmonary-lungs
- (R) Respiratory
- (S) Skeletal
- (C) Spinal cord
- (Q) Spleen
- (T) Thyroid, other endocrine gland
- (V) Vertebrae

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

APPENDIX F

NASS Vehicle Forms

(Vehicle #2)



GENERAL VEHICLE FORM

1. ~~Primary Sampling Unit Number~~ _____2. Case Number - ~~Stratum~~ 92-103. Vehicle Number 02

VEHICLE IDENTIFICATION

4. Vehicle Model Year 88
Code the last two digits of the model year
(99) Unknown5. Vehicle Make (specify): 07DODGEApplicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown6. Vehicle Model (specify): 442CARAVAN SEApplicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown7. Body Type 20
Note: Applicable codes may be found on
the back of this page.

8. Vehicle Identification Number

2B4FK41K1JRLeft justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nine's

OFFICIAL RECORDS

9. Police Reported Vehicle Disposition 1
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown10. Police Reported Travel Speed 60Code to the nearest mph (NOTE: 00 means
less than 0.5 mph)
(97) 96.5 mph and above
(99) Unknown11. Police Reported Alcohol Presence 0

- (0) No alcohol present
(1) Yes (alcohol present)
(7) Not reported
(8) No driver present
(9) Unknown

Note: See variables 37 through 55
(Page 4) for information on Other Drugs12. Alcohol Test Result For Driver 96

- Code actual value (decimal implied
before first digit—0.xx)
(95) Test refused
(96) None given
(97) AC test performed, results unknown
(98) No driver present
(99) Unknown

Source: _____

ACCIDENT RELATED

13. Speed Limit 55

- (00) No statutory limit
Code posted or statutory speed limit
(99) Unknown

14. Attempted Avoidance Maneuver 01

- (00) No impact
(01) No avoidance actions
(02) Braking (no lockup)
(03) Braking (lockup)
(04) Braking (lockup unknown)
(05) Releasing brakes
(06) Steering left
(07) Steering right
(08) Braking and steering left
(09) Braking and steering right
(10) Accelerating
(11) Accelerating and steering left
(12) Accelerating and steering right
(97) No driver present
(98) Other action (specify):

(99) Unknown

15. Accident Type 65

- Applicable codes may be found on the
back of page two of this field form
(00) No impact
Code the number of the diagram that
best describes the accident circumstance
(98) Other accident type (specify):

(99) Unknown

**** SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 ****

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): _____

- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 10,000$ lbs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravado, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 10,000$ lbs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 10,000$ lbs GVWR)
- (23) Van based motorhome ($\leq 10,000$ lbs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): _____

- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 10,000$ lbs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)
- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 10,000$ lbs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): _____
- (59) Unknown bus type

Medium/Heavy Trucks ($> 10,000$ lbs GVWR)

- (60) Step van ($> 10,000$ lbs GVWR)
- (61) Single unit straight truck ($10,000$ lbs $<$ GVWR $\leq 19,500$ lbs)
- (62) Single unit straight truck ($19,500$ lbs $<$ GVWR $\leq 26,000$ lbs)
- (63) Single unit straight truck ($> 26,000$ lbs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): _____
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

OCCUPANT RELATED

16. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
17. Number of Occupants This Vehicle 02
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
18. Number of Occupant Forms Submitted 02

24. Rollover 4
 (0) No rollover (no overturning)
- Rollover (primarily about the longitudinal axis)*
 (1) Rollover, 1 quarter turn only
 (2) Rollover, 2 quarter turns
 (3) Rollover, 3 quarter turns
 (4) Rollover, 4 or more quarter turns (specify):
6 QUARTER TURNS
- (5) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (9) Rollover (overturn), details unknown

VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 03,200
362 Code weight to nearest 100 pounds.
 (010) Less than 1050 pounds
 (135) 13,500 pounds or more
 (999) Unknown
- Source: NADA.
20. Vehicle Cargo Weight 0000
 Code weight to nearest 100 pounds.
 (00) Less than 50 pounds ~ 50 LBS
 (97) 9,650 pounds or more CAR SEAT & STROLLER
 (99) Unknown

OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 0
26. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact
- Override (see specific CDC)*
 (1) 1st CDC
 (2) 2nd CDC
 (3) Other not automated CDC (specify):

- Underride (see specific CDC)*
 (4) 1st CDC
 (5) 2nd CDC
 (6) Other not automated CDC (specify):

- (7) Medium/heavy truck or bus override
 (9) Unknown

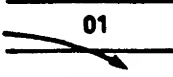
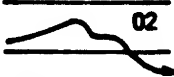
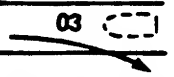
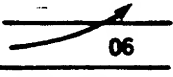
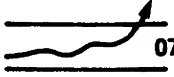
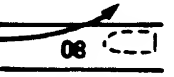



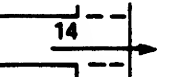
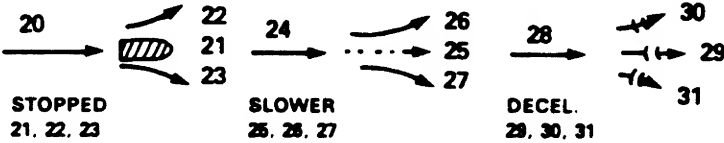




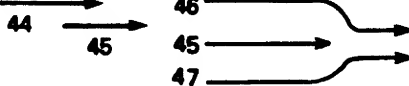






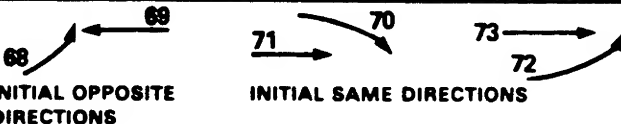


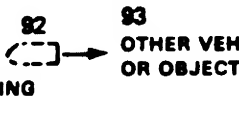
RECONSTRUCTION DATA

21. Towed Trailing Unit 0
 (0) No towed unit
 (1) Yes--towed trailing unit
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 0
 (0) No
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
 (0) Not collision (for highest delta V) with tree or pole
 (1) Not damaged
 (2) Cracked/sheared
 (3) Tilted <45 degrees
 (4) Tilted ≥45 degrees
 (5) Uprooted tree
 (6) Separated pole from base
 (7) Pole replaced
 (8) Other (specify):

 (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

- Values: (000)-(359) Code actual value
 (997) Noncollision
 (998) Impact with object
 (999) Unknown
27. Heading Angle For This Vehicle 270
28. Heading Angle For Other Vehicle 060

Category	Configuration	ACCIDENT TYPES (Includes Intent)					
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN	
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN	
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN
II. Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23 22 21 23 24 SLOWER 26, 28, 27 26 25 27 28 DECEL. 29, 30, 31 30 29 31			(EACH • 32) SPECIFICS OTHER	(EACH • 33) SPECIFICS UNKNOWN	
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER	(EACH • 43) SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 45 46 45 47			(EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN	
III. Same Trafficway Opposite Direction	G. Head-On	 50 51 LATERAL MOVE		(EACH • 52) SPECIFICS OTHER			(EACH • 53) SPECIFICS UNKNOWN
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER	(EACH • 63) SPECIFICS UNKNOWN
	I. Sideswipe/ Angle	 64 65 LATERAL MOVE		(EACH • 66) SPECIFICS OTHER			(EACH • 67) SPECIFICS UNKNOWN
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 69 71 70 73 72 INITIAL OPPOSITE DIRECTIONS INITIAL SAME DIRECTIONS			(EACH • 74) SPECIFICS OTHER	(EACH • 75) SPECIFICS UNKNOWN	
	K. Turn Into Path	 76 77 79 78 81 80 83 82 TURN INTO SAME DIRECTION TURN INTO OPPOSITE DIRECTIONS			(EACH • 84) SPECIFICS OTHER	(EACH • 85) SPECIFICS UNKNOWN	
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 87 88 89			(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN	
VI. Miscellaneous	M. Backing Etc.	 92 93 BACKING VEH. OTHER VEH. OR OBJECT			98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

29. Basis for Total Delta V (highest)

1*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

Delta V Not Calculated

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

COMPUTER GENERATED DELTA V

30. Total Delta V

Secondary Highest

1414.2 Nearest mph

(NOTE: 00 means less than
0.5 mph)
(97) 96.5 mph and above
(99) Unknown

31. Longitudinal Component of
Delta V+ 0 0 8- 8.1 Nearest mph

(NOTE: 00 means greater than
-0.5 and less than +0.5 mph)
(±97) ±96.5 mph and above
(99) Unknown

Secondary Highest

32. Lateral Component of Delta V

⊕
- 1 2+ 11.6 Nearest mph

(NOTE: 00 means greater than
-0.5 and less than +0.5 mph)
(±97) ±96.5 mph and above
(99) Unknown

33. Energy Absorption

0 3 0 . 3 0 030,311.7 Nearest 100 foot-lbs

(NOTE: 0000 means less than 50 foot-lbs)
(9997) 999,650 foot-lbs or more
(9999) Unknown

34. Confidence In Reconstruction Program
Results (For Highest Delta V)1

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify):

1

36. Is this an AOPS Vehicle?

- (0) No
- (1) Yes

0

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [] YES [] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [] YES [] NO

37. Police Reported Other Drug Presence 0

- (0) No other drugs present
- (1) Yes (other drug present)
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Observation/Perception Test Type For Driver 0

- (0) No observation/perception test given
- (1) Drug recognition technician (DRT) determination using DEC process
- (2) Behavioral
- (3) Other physical observation/perception determination (specify): _____
- (4) DEC process available, unknown if determination made
- (5) DEC process not available, unknown if other observation/perception test given
- (7) Other observation/perception test (specify): _____
- (8) No driver present

39. Other Drug Specimen Test Type For Driver 0

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): _____
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

**DRUG EVALUATION CLASSIFICATION
OTHER DRUGS TEST RESULTS FOR DRIVER**

DEC		Observation/ Perception Test Results	Specimen Test Results
Narcotic Drug	40.	<u>0</u>	41. <u>0</u>
Depressant Drug	42.	<u>0</u>	43. <u>0</u>
Stimulant Drug	44.	<u>0</u>	45. <u>0</u>
Hallucinogen Drug	46.	<u>0</u>	47. <u>0</u>
Cannabinoid Drug	48.	<u>0</u>	49. <u>0</u>
Phencyclidine (PCP)	50.	<u>0</u>	51. <u>0</u>
Inhalant Drug	52.	<u>0</u>	53. <u>0</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54.	<u>0</u>	55. <u>0</u>

Codes For Observation/Perception Test Results

- (0) No DEC observation/perception test given
- (1) Passed DEC observation/perception test
- (2) Failed DEC observation/perception test
- (3) DEC observation/perception test given—
results unknown
- (8) No driver present
- (9) Unknown if DEC observation/perception
test given

Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or
not obtained
- (8) No driver present
- (9) Unknown if specimen test given

OTHER DATA

56. Driver's Zip Code

- (00000) Driver not present
 (00001) Driver not a resident of U.S. or territories
 Code actual 5-digit zip code
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present
 (1) White (non-Hispanic)
 (2) Black (non-Hispanic)
 (3) White (Hispanic)
 (4) Black (Hispanic)
 (5) American Indian, Eskimo or Aleut
 (6) Asian or Pacific Islander
 (8) Other (specify):
 (9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use
 (1) Taxi
 (2) Vehicle used as school bus
 (3) Vehicle used as other bus
 (4) Military
 (5) Police
 (6) Ambulance
 (7) Hearse
 (8) Fire truck or car
 (9) Unknown

ROLLOVER DATA

If GV07 (Body Type) \neq 1-49, leave GV59-GV63 blank.
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover
 (1) Trip-over
 (2) Flip-over
 (3) Turn-over
 (4) Climb-over
 (5) Fall-over
 (6) Bounce-over
 (7) Collision with another vehicle
 (8) Other rollover initiation type (specify):
 (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (9) Unknown

61. Rollover Initiation Object Contacted

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify):
 (8) Non-contact rollover forces (specify):
 (9) Unknown

63. Direction of Initial Roll

- (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (5) End-over-end (i.e., primarily about the lateral axis)
 (9) Unknown roll direction

PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight
 (02) Slowing or stopping in traffic lane
 (03) Starting in traffic lane
 (04) Stopped in traffic lane
 (05) Passing or overtaking another vehicle
 (06) Disabled or parked in travel lane
 (07) Leaving a parking position
 (08) Entering a parking position
 (09) Turning right
 (10) Turning left
 (11) Making a U-turn
 (12) Backing up (other than for parking position)
 (13) Negotiating a curve
 (14) Changing lanes
 (15) Merging
 (16) Successful avoidance maneuver to a previous critical event
 (97) Other (specify):
 (98) No driver present
 (99) Unknown

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover
(01-30) — Vehicle Number

Noncollision

(31) Turn-over — fall-over
(33) Jackknife

Collision With Fixed Object

(41) Tree (≤ 4 inches in diameter)
(42) Tree (> 4 inches in diameter)
(43) Shrubbery or bush
(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

(50) Pole or post (≤ 4 inches in diameter)
(51) Pole or post (> 4 inches but ≤ 12 inches in diameter)
(52) Pole or post (> 12 inches in diameter)
(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail)
(specify): _____

(57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify): _____

(69) Unknown fixed object

Collision with Nonfixed Object

(71) Motor vehicle not in-transport
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(88) Other nonfixed object (specify): _____

(89) Unknown nonfixed object

(98) Other event (specify): _____

(99) Unknown event or object

PRECRASH DATA (Continued)**65. Critical Precrash Event** 62*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

Other Motor Vehicle In Lane

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): _____
- (99) Unknown

For Corrective Actions Attempted see variable GV14
(Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver 0

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): _____
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action) 0

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

***** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), ***
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.**

***** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.**

EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM**

1. Primary Sampling Unit Number _____ 2. Case Number Stratum <u>92-10</u>	3. Vehicle Number <u>02</u>
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VEHICLE IDENTIFICATION

VIN 2B4FK4LK1JR _____ Model Year 88
Vehicle Make (specify): DODGE Vehicle Model (specify): CARAVAN SE

LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	STARTS ON LF WHEEL, 6" BEHIND AXLE	SAME AS DIRECT
	EXTENDS 130.1" REARWARD	
2 (ROLL OVER)	FULL WIDTH OF ROOF AND LENGTH OF BODY	

CRUSH PROFILE

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

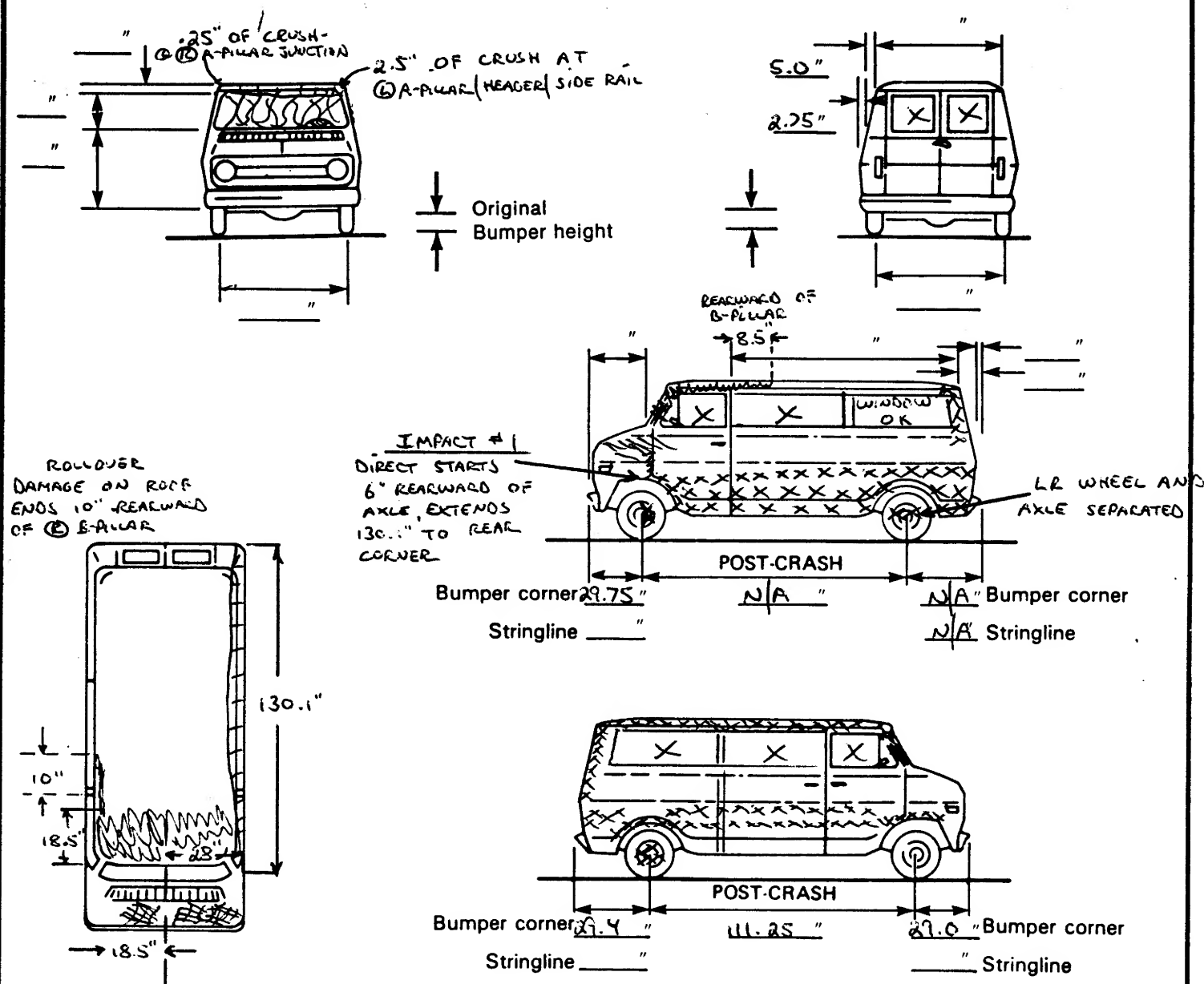
Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE a. Rotation physically restricted RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>1</u> (1) Yes (2) No (8) NA (9) Unk.		ORIGINAL SPECIFICATIONS Wheelbase <u>112.0</u> Overall Length <u>175.9</u> Maximum Width <u>72.0</u> Curb Weight <u>3162 LBS.</u> Average Track _____ Front Overhang _____ Rear Overhang _____ Engine Size: cyl./ displ. <u>4 cyl. 2.2 liter</u> Undeformed End Width <u>61.0</u>		WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only) RF \pm _____° LF \pm _____° RR \pm _____° LR \pm _____° Within ± 5 degrees
TYPE OF TRANSMISSION 3-SPEED <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic		DRIVE WHEELS <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD		
		Approximate Cargo Weight <u>550 LBS.</u>		



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewall, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision

(31) Overturn — rollover

(32) Fire or explosion

(33) Jackknife

(34) Other intraunit damage (specify):

(35) Noncollision injury

(38) Other noncollision (specify):

(39) Noncollision — details unknown

Collision With Fixed Object

(41) Tree (≤ 4 inches in diameter)(42) Tree (> 4 inches in diameter)

(43) Shrubbery or bush

(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

(50) Pole or post (≤ 4 inches in diameter)(51) Pole or post (> 4 inches but ≤ 12 inches in diameter)(52) Pole or post (> 12 inches in diameter)

(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail) (specify):

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify):

(69) Unknown fixed object

Collision with Nonfixed Object

(71) Motor vehicle not in-transport

(72) Pedestrian

(73) Cyclist or cycle

(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	01	-55	00	L	D	E	W	03
02	61	000	00	T	Y	D	0	03
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>10</u>	7. <u>L</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>03</u>

Second Highest Delta "V"

12. <u>02</u>	13. <u>61</u>	14. <u>00</u>	15. <u>T</u>	16. <u>Y</u>	17. <u>D</u>	18. <u>0</u>	19. <u>03</u>
---------------	---------------	---------------	--------------	--------------	--------------	--------------	---------------

CRUSH PROFILE

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN INCHES.)

HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	22. <u>±D</u>
<u>130</u>	<u>02</u>	<u>06</u>	<u>08</u>	<u>08</u>	<u>06</u>	<u>00</u>	<u>+0015</u>

Second Highest Delta "V"

23. <u>L</u>	24. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	25. <u>±D</u>
<u>---</u>	<u>---</u>	<u>---</u>	<u>ROLLOVER</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>+ - ---</u>

26. Are CDCs Documented but Not Coded on The Automated File?
(0) No
(1) Yes

0

27. Researcher's Assessment of Vehicle Disposition
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

1

28. Original Wheelbase
112.0 Code to the nearest tenth of an inch
(9999) Unknown

112.0

29. Is This A Multi-Stage Manufactured Vehicle
And/Or A Certified Altered Vehicle?

0

(0) No post manufacturer modifications

(1) Yes - post manufacturer modifications

(specify): _____

(Include photograph of CERTIFICATION
PLACARD in case report)

(9) Unknown if vehicle is modified

30. Fire Occurrence

0

(0) No fire

Yes, fire occurred

(1) Minor

(2) Major

(9) Unknown

31. Origin of Fire

0

(0) No fire

(1) Vehicle exterior (front, side, back, top)

(2) Exhaust system

(3) Fuel tank (and other fuel retention
system parts)

(4) Engine compartment

(5) Cargo/trunk compartment

(6) Instrument panel

(7) Passenger compartment area

(8) Other location (specify): _____

(9) Unknown

32. Type of Fuel Tank

1

(0) No fuel tank (electrical vehicle)

(1) Metallic

(2) Non-metallic

(9) Unknown

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS ***
(I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

INTERIOR VEHICLE FORM

BEST AVAILABLE COPY

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

92-10

3. Vehicle Number

02

INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

00

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 3 6. RF 3 7. LR 0 8. RR 3 9. TG/H 1

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 \neq 2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

GLAZING

Glazing Damage from Impact Forces

15. WS 2 16. LF 6 17. RF 6 18. LR *6 19. RR *6

20. BL 6 21. Roof 8 22. Other 8

(0) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(8) No glazing

(9) Unknown if damaged

* - LR 2nd quarter window was only tempered glass that remained intact

Glazing Damage from Occupant Contact

23. WS 0 24. LF 0 25. RF 0 26. LR 0 27. RR 0

28. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing

(1) Glazing contacted by occupant but no glazing damage

(2) Glazing in place and cracked by occupant contact

(3) Glazing in place and holed by occupant contact

(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact

(5) Glazing out-of-place by occupant contact and holed by occupant contact

(6) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

If No Glazing Damage *And* No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS 1 32. LF 2 33. RF 2 34. LR 3 35. RR 3

36. BL 3 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing

(1) AS-1 - Laminated

(2) AS-2 - Tempered

(3) AS-3 - Tempered-tinted

(4) AS-14 - Glass/Plastic

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

39. WS 1 40. LF 3 41. RF 3 42. LR *3 43. RR *3

44. BL 1 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing

(1) Fixed

(2) Closed

(3) Partially opened 50% open

(4) Fully opened

(9) Unknown

LF + RF door glass was
* LR quarter window opened
(clinged at forward edge)

INTRUSION WORKSHEET

TOP
VIEW

Longitudinal

Lateral

Lateral

Longitudinal

LEFT SIDE
VIEW

Vertical

Longitudinal

Longitudinal

RIGHT SIDE
VIEW

Vertical

Longitudinal

Longitudinal

Vertical

Note: Sketch intruded areas

LOCATION OF INTRUSION	INTRUDED COMPONENT	COMPARISON VALUE	INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>1 1</u>	48. <u>1 5</u>	49. <u>2</u>	50. <u>1</u>
2nd	51. <u>1 1</u>	52. <u>0 6</u>	53. <u>1</u>	54. <u>1</u>
3rd	55. <u>1 1</u>	56. <u>1 3</u>	57. <u>1</u>	58. <u>1</u>
4th	59. <u>1 1</u>	60. <u>1 0</u>	61. <u>3</u>	62. <u>3</u>
5th	63. <u>2 1</u>	64. <u>0 7</u>	65. <u>2</u>	66. <u>3</u>
6th	67. <u>2 1</u>	68. <u>2 8</u>	69. <u>2</u>	70. <u>3</u>
7th	71. <u>1 3</u>	72. <u>1 5</u>	73. <u>1</u>	74. <u>1</u>
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

LOCATION OF INTRUSION

Front Seat
(11) Left
(12) Middle
(13) Right

Second Seat
(21) Left
(22) Middle
(23) Right

Third Seat
(31) Left
(32) Middle
(33) Right

Fourth Seat
(41) Left
(42) Middle
(43) Right

(97) Catastrophic
(98) Other enclosed area (specify)

(99) Unknown

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify):

(27) Side panel - forward of the A-pillar

(28) Side panel - rear of the A-pillar

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify):
- (32) Other exterior object in the environment (specify):
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify):
- (99) Unknown

MAGNITUDE OF INTRUSION

- (1) ≥ 1 inch but < 3 inches
- (2) ≥ 3 inches but < 6 inches
- (3) ≥ 6 inches but < 12 inches
- (4) ≥ 12 inches but < 18 inches
- (5) ≥ 18 inches but < 24 inches
- (6) ≥ 24 inches
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING RIM/SPOKE DEFORMATION

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
	—		=	
	—		=	
	—		=	
	—		=	

STEERING COLUMN87. Steering Column Type 1

- (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify): _____

(9) Unknown

88. Blank X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-91 CDS.

89. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-91 CDS.

90. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-91 CDS.

91. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-91 CDS.

92. Steering Rim/Spoke Deformation 0

Code actual measured

deformation to the nearest inch.

- (0) No steering rim deformation
 (1-5) Actual measured value
 (6) 6 inches or more
 (8) Observed deformation cannot be measured
 (9) Unknown

93. Location of Steering Rim/Spoke Deformation 00

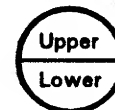
(00) No steering rim deformation

Quarter Sections

- (01) Section A
 (02) Section B
 (03) Section C
 (04) Section D

*Half Sections*

- (05) Upper half of rim/spoke
 (06) Lower half of rim/spoke
 (07) Left half of rim/spoke
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse
 (10) Undetermined location
 (99) Unknown

INSTRUMENT PANEL94. Odometer Reading 077,000

76,696.6 miles—Code mileage to the nearest 1,000 miles

- (000) No odometer
 (001) Less than 1,500 miles
 (300) 299,500 miles or more
 (999) Unknown

Source: _____

95. Instrument Panel Damage from Occupant Contact? 0

- (0) No
 (1) Yes
 (9) Unknown

96. Knee Bolsters Deformed from Occupant Contact? 8

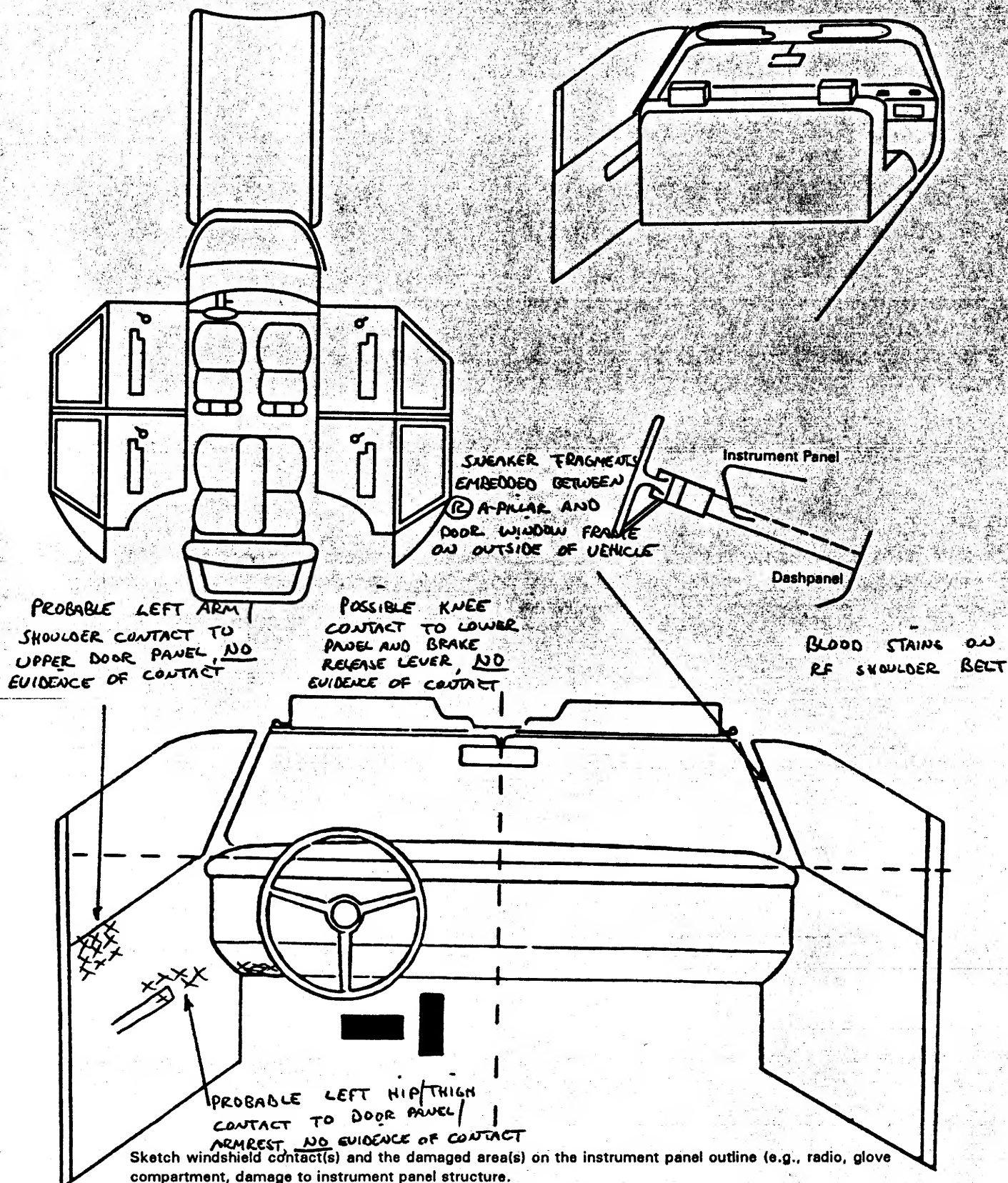
- (0) No
 (1) Yes
 (8) Not present
 (9) Unknown

97. Did Glove Compartment Door Open During Collision(s)? 8

- (0) No
 (1) Yes UNDER RF SEAT
 (8) Not present
 (9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	09	DRIVER	(1) KNEE	NO EVIDENCE OF CONTACT	3
B	20	DRIVER	(1) THIGH/HIP	NO EVIDENCE OF CONTACT	2
C	21	DRIVER	" "	NO EVIDENCE OF CONTACT	2
D	41	DRIVER	TORSO/ABD.	NO LOADING EVIDENCE	1
E	41	RF PASSENGER	TORSO/ABD.	BLOOD STAINS, NO LOADING EVIDENCE	1
F	32	RF PASSENGER	(1) FOOT	SNEAKER FRAGMENTS	1
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify): _____
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): _____
- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag
- (46) Other occupants (specify): _____
- (47) Interior loose objects

- (48) Child safety seat (specify): _____

- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Left	Right
FIRST	Availability/Function	○	○
	Deployment	○	○
	Failure	○	○

Air Bag System Availability/Function

- (0) Not equipped/not available
(1) Air bag

Non-functional

- (2) Air bag disconnected (specify): _____

- (3) Air bag not reinstalled

- (9) Unknown

Air Bag System Deployment

- (0) Not equipped/not available

- (1) Air bag deployed during accident (as a result of impact)

- (2) Air bag deployed inadvertently just prior to accident

- (3) Air bag deployed, accident sequence undetermined

- (4) Nondeployed

- (5) Unknown if deployed

- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)

- (9) Unknown

Did Air Bag System Fail?

- (0) Not equipped/not available

- (1) No

- (2) Yes (specify): _____

- (9) Unknown

AUTOMATIC BELTS

		Left	Right
FIRST	Availability/Function	○	○
	Use	○	○
	Type	○	○
	Proper Use	○	○
	Failure Modes	○	○

Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative

- (9) Unknown

Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative

- (1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)

- (3) Automatic belt use unknown

- (9) Unknown

Automatic (Passive) Belt System Type

- (0) Not equipped/not available

- (1) Non-motorized system

- (2) Motorized system

- (9) Unknown

Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm

- (4) Automatic shoulder belt worn behind back

- (5) Automatic belt worn around more than one person

- (6) Lap portion of automatic belt worn on abdomen

- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____

- (8) Other improper use of automatic belt system (specify): _____

- (9) Unknown

Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)

- (3) Broken buckle or latchplate

- (4) Upper anchorage separated

- (5) Other anchorage separated (specify): _____

- (6) Broken retractor

- (7) Combination of above (specify): _____

- (8) Other automatic belt failure (specify): _____

- (9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	-	4
	Use	04	-	04
	Failure Modes	1	-	1
SECOND	Availability	3	3	3
	Use	-	-	-
	Failure Modes	-	-	-
THIRD	Availability			
	Use			
	Failure Modes			
OTHER	Availability			
	Use			
	Failure Modes			

Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown

(08) Other belt used (specify): _____

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other manual belt failure (specify): _____
- (9) Unknown

5 PASSENGER
SEATING

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat		TODDLER	SEAT	PLACED	IN	SECOND SEAT,
2. Child Safety Seat Orientation		NOT	USED,	NOT	RESTRAINED	
3. Child Safety Seat Harness Usage		SEAT	+	STROLLER	(CARGO)	WERE
4. Child Safety Seat Shield Usage		THROWN	FROM	VEHICLE	DURING	
5. Child Safety Seat Tether Usage				ROLL OVER		
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	1	-	1
	Seat Type	10	-	10
	Seat Performance	1	-	1
	Seat Orientation	1	-	1
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
THIRD	Head Restraint Type/Damage	X		
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage	X		
	Seat Type			
	Seat Performance			
	Seat Orientation			

Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: _____

(9) Unknown _____

Seat Type (this Occupant Position)

- (00) No seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____

- (10) Box mounted seat (i.e., van type)
- (99) Unknown

Seat Performance (this Occupant Position)

- (0) No seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____

(7) Combination of above (specify): _____

(8) Other (specify): _____

(9) Unknown _____

Seat Orientation (this Occupant Position)

- (0) No seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____

(9) Unknown _____

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No ☐ Yes ☒

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number	01	02				
Ejection	1	1				
(Note on Vehicle Interior Sketch) Ejection Area	2	3				
Ejection Medium	4	4				
Medium Status	1	1				

Ejection

- (1) Complete ejection
- (1) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

Ejection Area

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown**Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

(5) Integral structure

- (8) Other medium (specify):

(9) Unknown**Medium Status (Immediately Prior to Impact)**

- ✓ (1) Open (PARTIAL)
- (2) Closed
- (3) Integral structure
- (9) Unknown

ENTRAPMENT No ☒ Yes ☐

Describe entrapment mechanism: DOOR GLASS SHATTERED DURING ROLLOVER

Component(s):

(Note in vehicle interior diagram)

APPENDIX G

NASS Occupant Injury Forms
(Vehicle #2)



OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number _____
2. Case Number - ~~Stratum~~ 92-10
3. Vehicle Number 02
4. Occupant Number 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 36
Code actual age at time of accident.
(00) Less than one year old (specify by month): _____
(97) 97 years and older _____
(99) Unknown _____
6. Occupant's Sex 2
(1) Male
(2) Female
(9) Unknown
7. Occupant's Height 6'7"
Code actual height to the nearest inch.
(99) Unknown
8. Occupant's Weight (30 LBS) 130
Code actual weight to the nearest pounds.
(999) Unknown
9. Occupant's Role 1
(1) Driver
(2) Passenger
(9) Unknown
10. Occupant's Seat Position 11
Front Seat
(11) Left side
(12) Middle
(13) Right side
(14) Other (specify): _____
(15) On or in the lap of another occupant _____
- Second Seat*
(21) Left side
(22) Middle
(23) Right side
(24) Other (specify): _____
(25) On or in the lap of another occupant _____
- Third Seat*
(31) Left side
(32) Middle
(33) Right side
(34) Other (specify): _____
(35) On or in the lap of another occupant _____
- Fourth Seat*
(41) Left side
(42) Middle
(43) Right side
(44) Other (specify): _____
(45) On or in the lap of another occupant _____
- (97) In or on unenclosed area
(98) Other seat (specify): _____
(99) Unknown

11. Occupant Posture 0
(0) Normal posture
(1) Abnormal posture (specify): _____
(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection 2
(0) No ejection
(1) Complete ejection
(2) Partial ejection
(3) Ejection, unknown degree
(9) Unknown
13. Ejection Area 2
(0) No ejection
(1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear
(7) Roof
(8) Other area (e.g., back of pickup, etc.) (specify): _____
(9) Unknown
14. Ejection Medium 4
(0) No ejection
(1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify): LF DOOR GLASS SHATTERED
(5) Integral structure
(8) Other medium (specify): _____
(9) Unknown
15. Medium Status (Immediately Prior To Impact) 1
(0) No ejection -
(1) Open PARTIAL
(2) Closed
(3) Integral structure
(9) Unknown
16. Entrapment 0
(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)
(0) Not entrapped
(1) Entrapped
(9) Unknown

RESTRAINT SYSTEM AND SEAT EVALUATION**17. Manual (Active) Belt System Availability** 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown _____

18. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify): _____

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

- (6) Broken retractor
- (7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled _____

(9) Unknown _____

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Did Air Bag System Fail? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____

(9) Unknown _____

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): _____

(8) Restrained, type unknown _____

(9) Police indicated "unknown" _____

25. Head Restraint Type/Damage by Occupant at This Occupant Position 1

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____

(9) Unknown _____

26. Seat Type (this Occupant Position) 1 0
- (00) Occupant not seated or no seat
 - (01) Bucket
 - (02) Bucket with folding back
 - (03) Bench
 - (04) Bench with separate back cushions
 - (05) Bench with folding back(s)
 - (06) Split bench with separate back cushions
 - (07) Split bench with folding back(s)
 - (08) Pedestal (i.e., column supported)
 - (09) Other seat type (specify): _____
 - (10) Box mounted seat (i.e., van type)
 - (99) Unknown

27. Seat Performance (this Occupant Position) 1
- (0) Occupant not seated or no seat
 - (1) No seat performance failure(s)
 - (2) Seat adjusters failed
 - (3) Seat back folding locks or "seat back" failed
 - (4) Seat track/anchors failed
 - (5) Deformed by impact of occupant
 - (6) Deformed by passenger compartment intrusion (specify): _____
 - (7) Combination of above (specify): _____
 - (8) Other (specify): _____
 - (9) Unknown

CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 0 0 0
- (000) No child safety seat
 - Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
 - (950) Built-in child safety seat
 - (997) Other make/model (specify): _____
 - (998) Unknown make/model
 - (999) Unknown if child safety seat used
29. Type of Child Safety Seat 0
- (0) No child safety seat
 - (1) Infant seat
 - (2) Toddler seat
 - (3) Convertible seat
 - (4) Booster seat
 - (7) Other type child safety seat (specify): _____
 - (8) Unknown child safety seat type
 - (9) Unknown if child safety seat used

30. Child Safety Seat Orientation 0 0
- (00) No child safety seat
 - Designed for Rear Facing for This Age/Weight*
 - (01) Rear facing
 - (02) Forward facing
 - (08) Other orientation (specify): _____
 - (09) Unknown orientation

- Designed For Forward Facing for This Age/Weight*
- (11) Rear facing
 - (12) Forward facing
 - (18) Other orientation (specify): _____
 - (19) Unknown orientation

- Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*
- (21) Rear facing
 - (22) Forward facing
 - (28) Other orientation (specify): _____
 - (29) Unknown orientation
 - (99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0 0
32. Child Safety Seat Shield Usage 0 0
33. Child Safety Seat Tether Usage 0 0
- Note: Options below applicable to Variables OA31-OA33.
- (00) No child safety seat

- Not Designed With Harness/Shield/Tether*
- (01) After market harness/shield/tether added, not used
 - (02) After market harness/shield/tether used
 - (03) Child safety seat used, but no after market harness/shield/tether added
 - (09) Unknown if harness/shield/tether added or used

- Designed With Harness/Shield/Tether*
- (11) Harness/shield/tether not used
 - (12) Harness/shield/tether used
 - (19) Unknown if harness/shield/tether used

- Unknown If Designed With Harness/Shield/Tether*
- (21) Harness/shield/tether not used
 - (22) Harness/shield/tether used
 - (29) Unknown if harness/shield/tether used
 - (99) Unknown if child safety seat used

INJURY CONSEQUENCES34. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):

(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown

37. Hospital Stay 00

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 00

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

39. Time to Death 00

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 24 hours, 2 days = 48, ... n days = 24 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
- (97) Other result (specify):

(99) Unknown

43. Number of Recorded Injuries for This Occupant 06

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM

44. Automatic (Passive) Belt System Availability/ Function 0
- (0) Not equipped/not available
 - (1) 2 point automatic belts
 - (2) 3 point automatic belts
 - (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

45. Automatic (Passive) Belt System Use 0
- (0) Not equipped/not available/destroyed or rendered inoperative
 - (1) Automatic belt in use
 - (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
 - (3) Automatic belt use unknown
 - (9) Unknown

46. Automatic (Passive) Belt System Type 0
- (0) Not equipped/not available
 - (1) Non-motorized system
 - (2) Motorized system
 - (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0
- (0) Not equipped/not available/not used
 - (1) Automatic belt used properly
 - (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of automatic belt system (specify): _____
- (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0
- (0) Not equipped/not available/not in use
 - (1) No automatic belt failure(s)
 - (2) Torn webbing (stretched webbing not included)
 - (3) Broken buckle or latchplate
 - (4) Upper anchorage separated
 - (5) Other anchorage separated (specify): _____
 - (6) Broken retractor
 - (7) Combination of above (specify): _____
 - (8) Other automatic belt failure (specify): _____
 - (9) Unknown

49. Seat Orientation (this Occupant Position) 1
- (0) Occupant not seated or no seat
 - (1) Forward facing seat
 - (2) Rear facing seat
 - (3) Side facing seat (inward)
 - (4) Side facing seat (outward)
 - (8) Other (specify): _____
 - (9) Unknown

TRAUMA DATA

50. Glasgow Coma Scale (GCS) Score 15
(at Medical Facility)
- (00) Not injured
 - (01) Injured - not treated at medical facility
 - (02) No GCS Score at medical facility
 - (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
 - (97) Injured, details unknown
 - (99) Unknown if injured

51. Was the Occupant Given Blood? 1
- (1) No - blood not given
 - (2) Yes - blood given (specify units): _____
 - (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO₃ 01
- (00) Not injured
 - (01) Injured, ABGs not measured or reported
 - (02-50) Code the actual value of the HCO₃
 - (96) ABGs reported, HCO₃ unknown
 - (97) Injured, details unknown
 - (99) Unknown if injured

UPDATE CANDIDATE? NO [☒] YES []OCCUPANT INJURY FORM INCLUDED WITH INITIAL SUBMISSION? NO [] YES [☒]

*** STOP HERE ***
IF THERE ARE NO RECORDED INJURIES
(I.E., OA43 = 00,97,99)



OCCUPANT INJURY FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

92-10

3. Vehicle Number

02

4. Occupant Number

01

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	O.I.C.-A.I.S					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
		Body Region	Aspect	Lesion	System Organ	A.I.S. Severity				
1st	5. <u>3</u>	6. <u>H</u>	7. <u>L</u>	8. <u>L</u>	9. <u>I</u>	10. <u>1</u>	11. <u>91</u>	12. <u>2</u>	13. <u>2</u>	14. <u>00</u>
2nd	15. <u>3</u>	16. <u>E</u>	17. <u>L</u>	18. <u>A</u>	19. <u>I</u>	20. <u>1</u>	21. <u>84</u>	22. <u>1</u>	23. <u>1</u>	24. <u>00</u>
3rd	25. <u>3</u>	26. <u>S</u>	27. <u>L</u>	28. <u>A</u>	29. <u>I</u>	30. <u>1</u>	31. <u>84</u>	32. <u>1</u>	33. <u>1</u>	34. <u>00</u>
4th	35. <u>3</u>	36. <u>K</u>	37. <u>L</u>	38. <u>L</u>	39. <u>I</u>	40. <u>1</u>	41. <u>91</u>	42. <u>2</u>	43. <u>1</u>	44. <u>00</u>
5th	45. <u>3</u>	46. <u>K</u>	47. <u>R</u>	48. <u>L</u>	49. <u>I</u>	50. <u>1</u>	51. <u>91</u>	52. <u>2</u>	53. <u>1</u>	54. <u>00</u>
6th	55. <u>7</u>	56. <u>I</u>	57. <u>L</u>	58. <u>C</u>	59. <u>I</u>	60. <u>1</u>	61. <u>21</u>	62. <u>1</u>	63. <u>1</u>	64. <u>04</u>
7th	65. <u> </u>	66. <u> </u>	67. <u> </u>	68. <u> </u>	69. <u> </u>	70. <u> </u>	71. <u> </u>	72. <u> </u>	73. <u> </u>	74. <u> </u>
8th	75. <u> </u>	76. <u> </u>	77. <u> </u>	78. <u> </u>	79. <u> </u>	80. <u> </u>	81. <u> </u>	82. <u> </u>	83. <u> </u>	84. <u> </u>
9th	85. <u> </u>	86. <u> </u>	87. <u> </u>	88. <u> </u>	89. <u> </u>	90. <u> </u>	91. <u> </u>	92. <u> </u>	93. <u> </u>	94. <u> </u>
10th	95. <u> </u>	96. <u> </u>	97. <u> </u>	98. <u> </u>	99. <u> </u>	100. <u> </u>	101. <u> </u>	102. <u> </u>	103. <u> </u>	104. <u> </u>

1.5" laceration of
the left parietal
scalp (AIS-1), flying
side glass

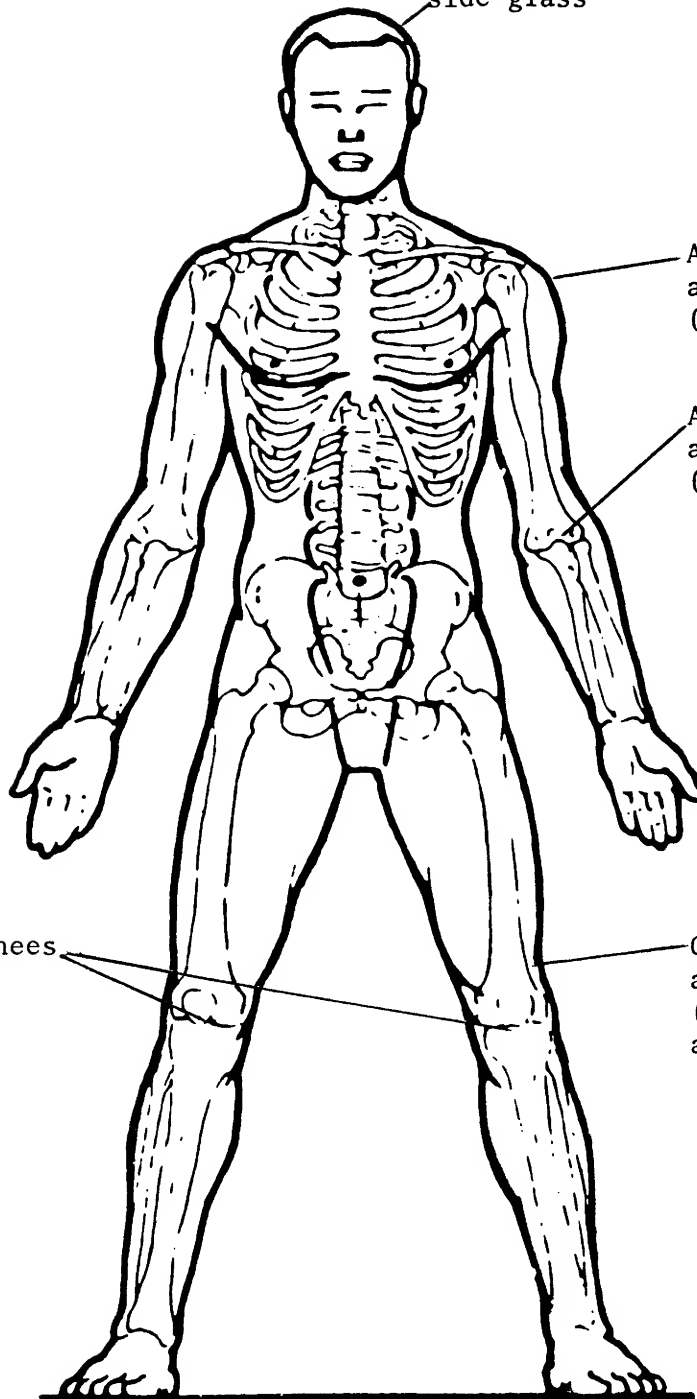
AGE 36
SEX Female
WT. 130 lbs.
HT. 67"

Abrasion of the lateral
aspect of the left shoulder
(AIS-1), road surface

Abrasion of the dorsal
aspect of the left elbow
(AIS-1), road surface

Lacerations of both knees
(AIS-1), contact with
shattered glass

Contusion of the lateral
aspect of the left thigh
(AIS-1), left door panel/
armrest



SOURCE OF INJURY DATA**OFFICIAL**

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

INJURY SOURCE**FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail.

- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify): _____

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): _____
- (68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): _____

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): _____

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): _____

- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): _____
- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): _____
- (93) Air bag exhaust gases
- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION**O.I.C. Body Region**

- (M) Abdomen
- (Q) Ankle-foot
- (A) Arm (upper)
- (B) Back-thoracolumbar spine
- (C) Chest
- (E) Elbow
- (F) Face
- (R) Forearm
- (H) Head-skull
- (U) Injured, unknown region
- (K) Knee
- (L) Leg (lower)
- (Y) Lower limb(s) (whole or unknown part)
- (N) Neck-cervical spine
- (P) Pelvic-hip
- (S) Shoulder
- (T) Thigh
- (X) Upper limb(s) (whole or unknown part)
- (O) Whole body
- (W) Wrist-hand

Aspect of Injury

- (A) Anterior-front
- (B) Bilateral (rib fracture only)
- (C) Central
- (I) Inferior-lower
- (U) Injured, unknown aspect
- (L) Left
- (P) Posterior-back
- (R) Right
- (S) Superior-upper
- (W) Whole region

Lesion

- (A) Abrasion
- (M) Amputation
- (V) Avulsion
- (B) Burn
- (K) Concussion
- (C) Contusion
- (N) Crush
- (G) Detachment, separation
- (D) Dislocation

(F) Fracture

- (Z) Fracture and dislocation
- (U) Injured, unknown lesion
- (L) Laceration
- (O) Other
- (P) Perforation, puncture
- (R) Rupture
- (S) Sprain
- (T) Strain
- (E) Total severance, transection

System/Organ

- (W) All systems in region
- (A) Arteries-veins
- (B) Brain
- (D) Digestive
- (E) Ears
- (O) Eye
- (H) Heart
- (U) Injured, unknown system
- (I) Integumentary
- (J) Joints
- (K) Kidneys

(L) Liver

- (M) Muscles
- (N) Nervous system
- (P) Pulmonary-lungs
- (R) Respiratory
- (S) Skeletal
- (C) Spinal cord
- (Q) Spleen
- (T) Thyroid, other endocrine gland
- (V) Vertebrae

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity



OCCUPANT ASSESSMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

11. Occupant Posture

(0) Normal posture

(1) Abnormal posture (specify):

(9) Unknown

EJECTION/ENTRAPMENT

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height 61"

Code actual height to the nearest inch.

(99) Unknown

8. Occupant's Weight 125 LBS.

Code actual weight to the nearest pounds.

(999) Unknown

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

12. Ejection

(0) No ejection

(1) Complete ejection

(2) Partial ejection

(3) Ejection, unknown degree

(9) Unknown

13. Ejection Area

(0) No ejection

(1) Windshield

(2) Left front

(3) Right front

(4) Left rear

(5) Right rear

(6) Rear

(7) Roof

(8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

14. Ejection Medium

(0) No ejection

(1) Door/hatch/tailgate

(2) Nonfixed roof structure

(3) Fixed glazing

(4) Nonfixed glazing (specify):

RF DOOR GLASS SHATTERED

(5) Integral structure

(8) Other medium (specify):

(9) Unknown

15. Medium Status (Immediately Prior To Impact)

(0) No ejection

(1) Open PARTIAL

(2) Closed

(3) Integral structure

(9) Unknown

16. Entrapment

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

(0) Not entrapped

(1) Entrapped

(9) Unknown

RESTRAINT SYSTEM AND SEAT EVALUATION**17. Manual (Active) Belt System Availability**4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): _____

(9) Unknown

18. Manual (Active) Belt System Use04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify): _____

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify): _____

(99) Unknown if belt used

19. Proper Use of Manual (Active) Belts1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

(3) Shoulder belt worn under arm

(4) Shoulder belt worn behind back or seat

(5) Belt worn around more than one person

(6) Lap belt worn on abdomen

(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown

20. Manual (Active) Belt Failure Modes During Accident1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown

21. Air Bag System Availability/Function0

- (0) Not equipped/not available
- (1) Air bag

Non-functional

(2) Air bag disconnected (specify): _____

(3) Air bag not reinstalled

(9) Unknown

22. Air Bag System Deployment0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Did Air Bag System Fail?0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____

(9) Unknown

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): _____

(8) Restrained, type unknown

(9) Police indicated "unknown"

25. Head Restraint Type/Damage by Occupant at This Occupant Position1

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): _____

(9) Unknown

26. Seat Type (this Occupant Position) 1 0

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): _____
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

CHILD SAFETY SEAT28. Child Safety Seat Make/Model 0 0 0

- (000) No child safety seat
- Applicable codes are found in your NASS CDS Data Collection, Coding and Editing
- (950) Built-in child safety seat
- (997) Other make/model (specify): _____
- (998) Unknown make/model
- (999) Unknown if child safety seat used

29. Type of Child Safety Seat 0

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify): _____
- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

30. Child Safety Seat Orientation 0 0

- (00) No child safety seat

Designed for Rear Facing for This Age/Weight

- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify): _____

- (09) Unknown orientation

Designed For Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify): _____

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify): _____

- (29) Unknown orientation

- (99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0 032. Child Safety Seat Shield Usage 0 033. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to Variables OA31-OA33.

- (00) No child safety seat

Not Designed With Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

INJURY CONSEQUENCES34. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify): _____

(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify): _____

(9) Unknown

37. Hospital Stay 10

- (00) Not Hospitalized
- _____ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 00

- _____ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

39. Time to Death 00

- _____ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- _____ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
- (97) Other result (specify): _____

(99) Unknown

43. Number of Recorded Injuries for This Occupant 02

- _____ Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

AUTOMATIC BELT SYSTEM44. Automatic (Passive) Belt System Availability/ Function 0

- (0) Not equipped/not available
 (1) 2 point automatic belts
 (2) 3 point automatic belts
 (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
 (9) Unknown

45. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Automatic belt in use
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
 (3) Automatic belt use unknown
 (9) Unknown

46. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
 (1) Non-motorized system
 (2) Motorized system
 (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
 (1) Automatic belt used properly
 (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
 (4) Automatic shoulder belt worn behind back
 (5) Automatic belt worn around more than one person
 (6) Lap portion of automatic belt worn on abdomen
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
 (1) No automatic belt failure(s)
 (2) Torn webbing (stretched webbing not included)
 (3) Broken buckle or latchplate
 (4) Upper anchorage separated
 (5) Other anchorage separated (specify):
 (6) Broken retractor
 (7) Combination of above (specify):
 (8) Other automatic belt failure (specify):
 (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):
 (9) Unknown

TRAUMA DATA50. Glasgow Coma Scale (GCS) Score (at Medical Facility) 02

- (00) Not injured
 (01) Injured - not treated at medical facility
 (02) No GCS Score at medical facility
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
 (97) Injured, details unknown
 (99) Unknown if injured

51. Was the Occupant Given Blood? 1

- (1) No - blood not given
 (2) Yes - blood given (specify units):
 (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO₃ 01

- (00) Not injured
 (01) Injured, ABGs not measured or reported
 (02-50) Code the actual value of the HCO₃
 (96) ABGs reported, HCO₃ unknown
 (97) Injured, details unknown
 (99) Unknown if injured

UPDATE CANDIDATE? NO [☒] YES []OCCUPANT INJURY FORM INCLUDED WITH INITIAL SUBMISSION? NO [] YES [☒]

*** STOP HERE ***
 IF THERE ARE NO RECORDED INJURIES
 (I.E., OA43 = 00,97,99)



OCCUPANT INJURY FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. ~~Primary Sampling Unit Number~~ _____

3. Vehicle Number 02

2. Case Number - Stratum 92-10

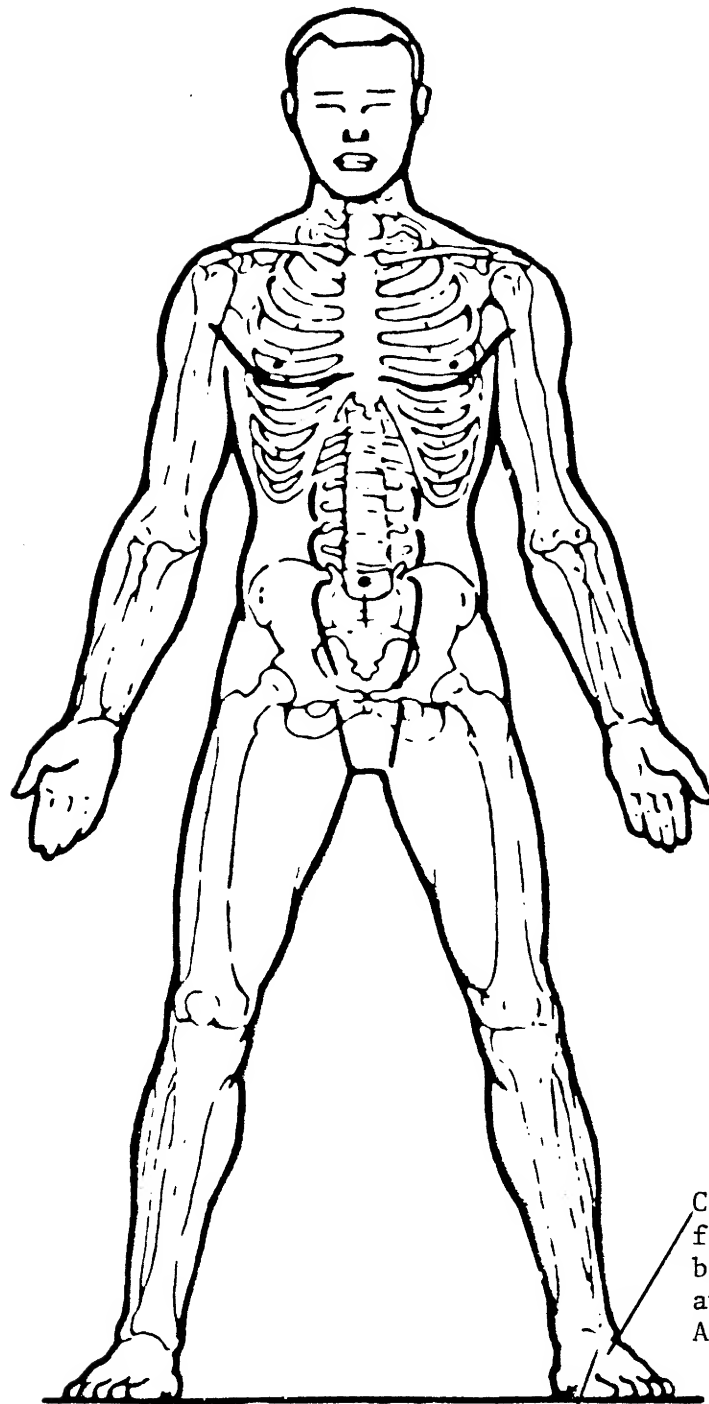
4. Occupant Number 02

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	O.I.C.-A.I.S					Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.	
	Body Region	Aspect	Lesion	System Organ	A.I.S. Severity					
1st	5. <u>2</u>	6. <u>Q</u>	7. <u>L</u>	8. <u>N</u>	9. <u>W</u>	10. <u>3</u>	11. <u>32/84</u>	12. <u>1</u>	13. <u>1</u>	14. <u>00</u>
2nd	15. <u>2</u>	16. <u>Q</u>	17. <u>L</u>	18. <u>A</u>	19. <u>I</u>	20. <u>1</u>	21. <u>84</u>	22. <u>1</u>	23. <u>1</u>	24. <u>00</u>
3rd	25. ____	26. ____	27. ____	28. ____	29. ____	30. ____	31. ____	32. ____	33. ____	34. ____
4th	35. ____	36. ____	37. ____	38. ____	39. ____	40. ____	41. ____	42. ____	43. ____	44. ____
5th	45. ____	46. ____	47. ____	48. ____	49. ____	50. ____	51. ____	52. ____	53. ____	54. ____
6th	55. ____	56. ____	57. ____	58. ____	59. ____	60. ____	61. ____	62. ____	63. ____	64. ____
7th	65. ____	66. ____	67. ____	68. ____	69. ____	70. ____	71. ____	72. ____	73. ____	74. ____
8th	75. ____	76. ____	77. ____	78. ____	79. ____	80. ____	81. ____	82. ____	83. ____	84. ____
9th	85. ____	86. ____	87. ____	88. ____	89. ____	90. ____	91. ____	92. ____	93. ____	94. ____
10th	95. ____	96. ____	97. ____	98. ____	99. ____	100. ____	101. ____	102. ____	103. ____	104. ____

AGE 14
SEX Female
WT. 125 lbs.
HT. 61"



Crushing injury of left foot (AIS-3), crushed between the road surface and the right upper A-pillar

Abrasion to the dorsal aspect of the left foot (AIS-1), road surface/A-pillar

SOURCE OF INJURY DATA**OFFICIAL**

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): _____
- (9) Police

INJURY SOURCE**FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A-pillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify): _____

LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify): _____
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): _____

- (28) Left side window sill

RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify): _____
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): _____

- (38) Right side window sill

INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): _____
- (44) Head restraint system
- (45) Air bag
- (46) Other occupants (specify): _____
- (47) Interior loose objects
- (48) Child safety seat (specify): _____
- (49) Other interior object (specify): _____

ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): _____

EXTERIOR OF OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): _____
- (68) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): _____
- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): _____

- (79) Rear surface

- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): _____

- (83) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): _____
- (86) Unknown vehicle or object

NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): _____
- (93) Air bag exhaust gases
- (97) Injured, unknown source

INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

OCCUPANT INJURY CLASSIFICATION**O.I.C. Body Region**

- (M) Abdomen
- (Q) Ankle-foot
- (A) Arm (upper)
- (B) Back-thoracolumbar spine
- (C) Chest
- (E) Elbow
- (F) Face
- (R) Forearm
- (H) Head-skull
- (U) Injured, unknown region
- (K) Knee
- (L) Leg (lower)
- (Y) Lower limb(s) (whole or unknown part)
- (N) Neck-cervical spine
- (P) Pelvic-hip
- (S) Shoulder
- (T) Thigh
- (X) Upper limb(s) (whole or unknown part)
- (O) Whole body
- (W) Wrist-hand

Aspect of Injury

- (A) Anterior-front
- (B) Bilateral (rib fracture only)
- (C) Central
- (I) Inferior-lower
- (U) Injured, unknown aspect
- (L) Left
- (P) Posterior-back
- (R) Right
- (S) Superior-upper
- (W) Whole region

Lesion

- (A) Abrasion
- (M) Amputation
- (V) Avulsion
- (B) Burn
- (K) Concussion
- (C) Contusion
- (N) Crush
- (G) Detachment, separation
- (D) Dislocation

(F) Fracture

- (Z) Fracture and dislocation
- (U) Injured, unknown lesion
- (L) Laceration
- (O) Other
- (P) Perforation, puncture
- (R) Rupture
- (S) Sprain
- (T) Strain
- (E) Total severance, transection

System/Organ

- (W) All systems in region
- (A) Arteries-veins
- (B) Brain
- (D) Digestive
- (E) Ears
- (O) Eye
- (H) Heart
- (U) Injured, unknown system
- (I) Integumentary
- (J) Joints
- (K) Kidneys

(L) Liver

- (M) Muscles
- (N) Nervous system
- (P) Pulmonary-lungs
- (R) Respiratory
- (S) Skeletal
- (C) Spinal cord
- (Q) Spleen
- (T) Thyroid, other endocrine gland
- (V) Vertebrae

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity